


STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS AND MINING						FORM 3 AMENDED REPORT <input type="checkbox"/>				
APPLICATION FOR PERMIT TO DRILL						1. WELL NAME and NUMBER Woodward 4-14C4				
2. TYPE OF WORK DRILL NEW WELL <input checked="" type="checkbox"/> REENTER P&A WELL <input type="checkbox"/> DEEPEN WELL <input type="checkbox"/>						3. FIELD OR WILDCAT NORTH MYTON BENCH				
4. TYPE OF WELL Oil Well Coalbed Methane Well: NO						5. UNIT or COMMUNITIZATION AGREEMENT NAME				
6. NAME OF OPERATOR EP ENERGY E&P COMPANY, L.P.						7. OPERATOR PHONE 713 997-5038				
8. ADDRESS OF OPERATOR 1001 Louisiana, Houston, TX, 77002						9. OPERATOR E-MAIL maria.gomez@epenergy.com				
10. MINERAL LEASE NUMBER (FEDERAL, INDIAN, OR STATE) Fee			11. MINERAL OWNERSHIP FEDERAL <input type="checkbox"/> INDIAN <input type="checkbox"/> STATE <input type="checkbox"/> FEE <input checked="" type="checkbox"/>			12. SURFACE OWNERSHIP FEDERAL <input type="checkbox"/> INDIAN <input type="checkbox"/> STATE <input type="checkbox"/> FEE <input checked="" type="checkbox"/>				
13. NAME OF SURFACE OWNER (if box 12 = 'fee') Caroline Beth Woodward						14. SURFACE OWNER PHONE (if box 12 = 'fee') 801-225-6468				
15. ADDRESS OF SURFACE OWNER (if box 12 = 'fee') 1087 North 200 East, ,						16. SURFACE OWNER E-MAIL (if box 12 = 'fee')				
17. INDIAN ALLOTTEE OR TRIBE NAME (if box 12 = 'INDIAN')			18. INTEND TO COMMINGLE PRODUCTION FROM MULTIPLE FORMATIONS YES <input type="checkbox"/> (Submit Commingling Application) NO <input checked="" type="checkbox"/>			19. SLANT VERTICAL <input type="checkbox"/> DIRECTIONAL <input checked="" type="checkbox"/> HORIZONTAL <input type="checkbox"/>				
20. LOCATION OF WELL		FOOTAGES		QTR-QTR	SECTION	TOWNSHIP	RANGE	MERIDIAN		
LOCATION AT SURFACE		275 FNL 2315 FWL		NENW	14	3.0 S	4.0 W	U		
Top of Uppermost Producing Zone		700 FNL 2300 FWL		NENW	14	3.0 S	4.0 W	U		
At Total Depth		700 FNL 2300 FWL		NENW	14	3.0 S	4.0 W	U		
21. COUNTY DUCHESNE			22. DISTANCE TO NEAREST LEASE LINE (Feet) 275			23. NUMBER OF ACRES IN DRILLING UNIT 80				
			25. DISTANCE TO NEAREST WELL IN SAME POOL (Applied For Drilling or Completed) 2000			26. PROPOSED DEPTH MD: 12516 TVD: 12500				
27. ELEVATION - GROUND LEVEL 5973			28. BOND NUMBER 400JU0708			29. SOURCE OF DRILLING WATER / WATER RIGHTS APPROVAL NUMBER IF APPLICABLE Duchesne City				
Hole, Casing, and Cement Information										
String	Hole Size	Casing Size	Length	Weight	Grade & Thread	Max Mud Wt.	Cement	Sacks	Yield	Weight
Surf	12.25	9.625	0 - 2200	40.0	N-80 LT&C	0.0	Type V	473	2.36	12.0
							Class G	195	1.3	14.3
I1	8.75	7	0 - 9316	29.0	HCP-110 LT&C	10.4	Class G	678	1.91	12.5
							Class G	298	1.64	13.0
L1	6.125	5	9166 - 12516	18.0	HCP-110 LT&C	13.5	Class G	200	1.52	14.2
ATTACHMENTS										
VERIFY THE FOLLOWING ARE ATTACHED IN ACCORDANCE WITH THE UTAH OIL AND GAS CONSERVATION GENERAL RULES										
<input checked="" type="checkbox"/> WELL PLAT OR MAP PREPARED BY LICENSED SURVEYOR OR ENGINEER					<input checked="" type="checkbox"/> COMPLETE DRILLING PLAN					
<input checked="" type="checkbox"/> AFFIDAVIT OF STATUS OF SURFACE OWNER AGREEMENT (IF FEE SURFACE)					<input type="checkbox"/> FORM 5. IF OPERATOR IS OTHER THAN THE LEASE OWNER					
<input checked="" type="checkbox"/> DIRECTIONAL SURVEY PLAN (IF DIRECTIONALLY OR HORIZONTALLY DRILLED)					<input checked="" type="checkbox"/> TOPOGRAPHICAL MAP					
NAME Maria S. Gomez			TITLE Principal Regulatory Analyst			PHONE 713 997-5038				
SIGNATURE			DATE 04/08/2015			EMAIL maria.gomez@epenergy.com				
API NUMBER ASSIGNED 43013532830000			APPROVAL  Permit Manager							

**Woodward 4-14C4
Sec. 14, T3S, R4W
DUCHESNE COUNTY, UT**

EP ENERGY E&P COMPANY, L.P.

DRILLING PROGRAM

1. Estimated Tops of Important Geologic Markers

<u>Formation</u>	<u>Depth</u>
Green River (GRRV)	4,375' TVD
Green River (GRTN1)	5,114' TVD
Mahogany Bench	6,020' TVD
L. Green River	7,360' TVD
Wasatch	9,200' TVD
T.D. (Permit)	12,500' TVD / +/- 12,516' MD

2. Estimated Depths of Anticipated Water, Oil, Gas or Mineral Formations:

<u>Substance</u>	<u>Formation</u>	<u>Depth</u>
	Green River (GRRV)	4,375' TVD / 4,381' MD
	Green River (GRTN1)	5,114' TVD / 5,123' MD
	Mahogany Bench	6,020' TVD / 6,032' MD
Oil	L. Green River	7,360' TVD / 7,376' MD
Oil	Wasatch	9,200' TVD / 9,216' MD

3. Pressure Control Equipment: (Schematic Attached)

A Diverter System w/ rotating head on structural pipe from surface to 2,200' MD/TVD. A 10M BOP stack w/ rotating head, spacer spool, 5M annular, flex rams, blind rams & single w/ flex rams used from 2,200' MD/TVD to 9,316' MD / 9,300' TVD. A 10M BOP stack w/ rotating head, spacer spool, 5M annular, flex rams, blind rams & single w/ flex rams from 9,316' MD / 9,300' TVD to TD (12,516' MD / 12,500' TVD).

The BOPE and related equipment will meet the requirements of the 5M and 10M system.

We just drilled the Jenkins 3-14C4 (which is in the same section) & had no issues. We pre-set the conductor at 60' & the 9-5/8" at 2100'.

There are 5 water wells within 10,000' of the proposed location but none of them are within 3/4 mile.

There are 0 SWD wells within 3 miles of the proposed location.

OPERATORS MINIMUM SPECIFICATIONS FOR BOPE:

The surface casing will be equipped with a flanged casing head of 5M psi working pressure. An 11" 5M x 11" 10M spool, 11" x 10M psi BOP and 5M psi annular will be nipped up on the surface casing and tested to 250 psi low test / 3,000 psi high test for 10 minutes each prior to drilling out. The surface casing will be tested to 1,000 psi. for 30 mins. Intermediate casing will be tested to the greater of 1,500 psi or 0.22 psi/ft. The choke manifold equipment, upper Kelly cock and floor safety valves will be tested to 5M psi. The annular preventer will be tested to 250 psi low test / 4,000 psi high test. The 10M BOP will be installed with rotating head, spacer spool, 5M annular, flex rams, blind rams & single w/ flex rams from surface shoe to TD. The BOPE will be hydraulically operated.

In addition, the BOP equipment will be tested after running intermediate casing, after any repairs to the equipment and at least once every 30 days. Pipe and blind rams will be activated on each trip, annular preventer will be activated weekly and weekly BOP drills will be held with each crew.

Statement on Accumulator System and Location of Hydraulic Controls:

Precision 406 is expected to be used to drill the proposed well. Operations will commence after approval of this application. Manual and/or hydraulic controls will be in compliance with 5M and 10M psi systems.

Auxiliary Equipment:

- A) Pason Gas Monitoring 2,200' - TD
- B) Mud logger with gas monitor – 2,200' to TD
- C) Choke manifold with one manual and one hydraulic operated choke
- D) Full opening floor valve with drill pipe thread
- E) Upper and lower Kelly cock
- F) Shaker, de-sander and centrifuge

4. Proposed Casing & Cementing Program:

Please refer to the attached Wellbore Diagram.

All casing will meet or exceed the following design safety factors:

- Burst = 1.00
- Collapse = 1.125
- Tension = 1.2 (including 100k# overpull)

Cement design calculations for intermediate and production hole will be based on minimum 10% excess over gauge hole volumes. Actual volumes pumped will be a minimum of 10% excess over caliper volume to designed tops of cement for any section logged. A minimum of 50% excess over gauge volume will be pumped on surface casing.

5. Drilling Fluids Program:

Proposed Mud Program:

Interval	Type	Mud Weight
Surface	Air	Air
Intermediate	WBM	9.4 – 10.4
Production	WBM	11.0 – 13.5

Anticipated mud weights are based on actual offset well bottom-hole pressure data. Mud weights utilized may be somewhat higher to allow for trip margin and to provide hole stability for running logs and casing.

Visual mud monitoring equipment will be utilized.

6. Evaluation Program:

Logs:

Mud Log: 2,200' MD/TVD – TD

Open Hole Logs: Gamma Ray, Neutron-Density, Resistivity, Sonic, from surface casing shoe to TD.

7. Abnormal Conditions:

Maximum anticipated bottomhole pressure calculated at 12,500' TVD equals approximately 8,775 psi. This is calculated based on a 0.702 psi/ft gradient (13.5 ppg mud density at TD).

Maximum anticipated surface pressure equals approximately 6,025 psi (bottomhole pressure minus the pressure of a partially evacuated hole calculated at 0.22 psi/ft).

Maximum anticipated surface pressure based on frac gradient at 7" casing shoe is 0.8 psi/ft at 9,300' TVD = 7,440 psi

BOPE and casing design will be based on the lesser of the two MASPs which is 6,025 psi.

8. OPERATOR REQUESTS THAT THE PROPOSED WELL BE PLACED ON CONFIDENTIAL STATUS.

MECHANICAL

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DRILLING PROGRAM

CASING PROGRAM	SIZE	INTERVAL		WT.	GR.	CPLG.	BURST	COLLAPSE	TENSION
SURFACE	9-5/8"	0	2200	40.00	N-80	LTC	5,750	3,090	737
INTERMEDIATE	7"	0	9316	29.00	HCP-110	LTC	11,220	9,750	797
PRODUCTION LINER	5"	9166	12516	18.00	HCP-110	STL	13,940	15,450	341

CEMENT PROGRAM		FT. OF FILL	DESCRIPTION	SACKS	EXCESS	WEIGHT	YIELD
SURFACE	Lead	1,700	EXTENDACEM SYSTEM: Type V Cement + 2% Cal-Seal + 0.35% Versaset + 0.3% D-Air 5000 + 6% Salt + 2% Econolite + 0.125 Poly-E-Flake	473	100%	12.0 ppg	2.36
	Tail	500	HALCEM SYSTEM: Class G Cement + 3 lbm/sk Silicalite Compacted + 1% Salt + 0.3% Econolite + 0.25 lbm/sk Poly-E-Flake + 0.25 lbm/sk Kwik Seal + 0.3% D-AIR 5000	195	50%	14.3 ppg	1.30
INTERMEDIATE	Lead	6,866	EXTENDACEM SYSTEM: Class G Cement + 6% Bentonite + 0.2% Econolite + 0.3% Versaset + 0.75% HR-5 + 0.3% Super CBL + 0.2% Halad-322 + 0.125 lb/sk Poly-E-Flake	678	35%	12.5 ppg	1.91
	Tail	2,450	EXPANDACEM SYSTEM: Class G Cement + 4% Bentonite + 0.25 Poly-E-Flake + 0.1% Halad-413 + 5 lb/sk Silicalite Compacted + 0.15% SA-1015 + 0.3% HR-5	298	30%	13.0 ppg	1.64
PRODUCTION LINER		3,350	EXTENDACEM SYSTEM: Class G Cement + 0.2% Super CBL + 0.55% SCR-100 + 0.3% Halad-413 + 0.125 lbm/sk Poly-E-Flake + 3 lbm/sk Silicalite Compacted + 20% SS-200 + 0.10% SA-1015	200	30%	14.2 ppg	1.52

FLOAT EQUIPMENT & CENTRALIZERS	
SURFACE	PDC drillable float shoe, 1 joint casing, PDC drillable float collar. Thread lock all float equipment. Install bow spring centralizers on the bottom 3 joints of casing & every 3rd joint thereafter.
INTERMEDIATE	Halliburton's PDC drillable 10M P-110 float shoe, 1 joint, PDC drillable 10M P-110 float collar. Thread lock all float equipment. Maker joint at +/- 7,350'.
LINER	Float shoe, 1 joint, float collar, 1 joint, landing collar. Thread lock all FE. Maker joints every 1000'.

PROJECT ENGINEER(S): Brad MacAfee 713-997-6383

MANAGER: Bob Dodd

EP ENERGY E&P COMPANY, L.P.
WOODWARD 4-14C4
SECTION 14, T3S, R4W, U.S.B.&M.

PROCEED NORTH ON STATE ROAD 87 FROM THE INTERSECTION OF STATE ROAD 87 WITH US HIGHWAY 40 IN DUCHESNE, UTAH APPROXIMATELY 3.54 MILES TO AN INTERSECTION;

TURN RIGHT AND TRAVEL EASTERLY ON A COUNTY B ROAD 3.87 MILES TO AN INTERSECTION;

CONTINUE EASTERLY ON A GRAVEL ROAD 1.15 MILES TO AN INTERSECTION;

TURN LEFT AND TRAVEL NORTHEASTERLY THEN NORTHWESTERLY ON A GRAVEL ROAD 0.78 MILES TO THE BEGINNING OF THE ACCESS ROAD;

TURN LEFT AND FOLLOW ROAD FLAGS NORTHWESTERLY 0.44 MILES TO THE PROPOSED LOCATION;

TOTAL DISTANCE FROM DUCHESNE, UTAH TO THE PROPOSED WELL LOCATION IS APPROXIMATELY 9.61 MILES.

CONFIDENTIAL

EP ENERGY E&P COMPANY, L.P.

LOCATION LAYOUT FOR

WOODWARD 4-14C4

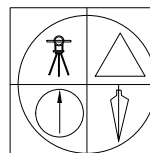
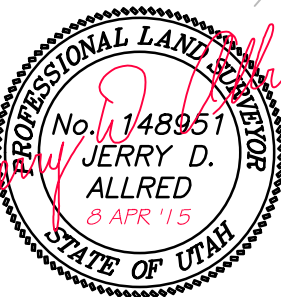
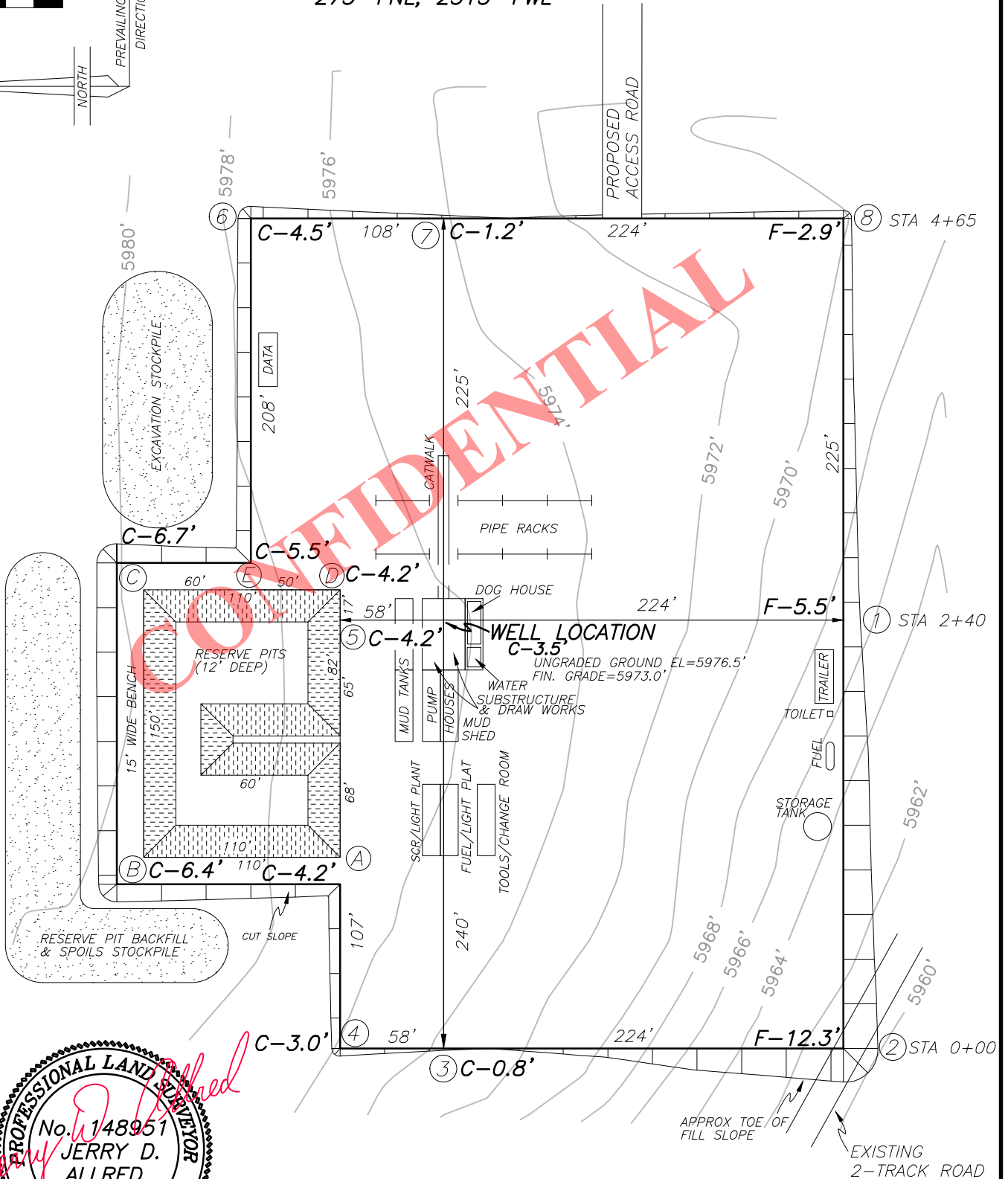
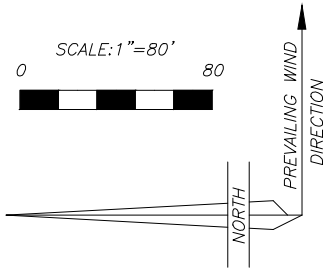
SECTION 14, T3S, R4W, U.S.B.&M.

275' FNL, 2315' FWL

FIGURE #1

SCALE: 1"=80'

0 80

**JERRY D. ALLRED & ASSOCIATES**
SURVEYING CONSULTANTS1235 NORTH 700 EAST--P.O. BOX 975
DUCHESNE, UTAH 84021
(435) 738-5352

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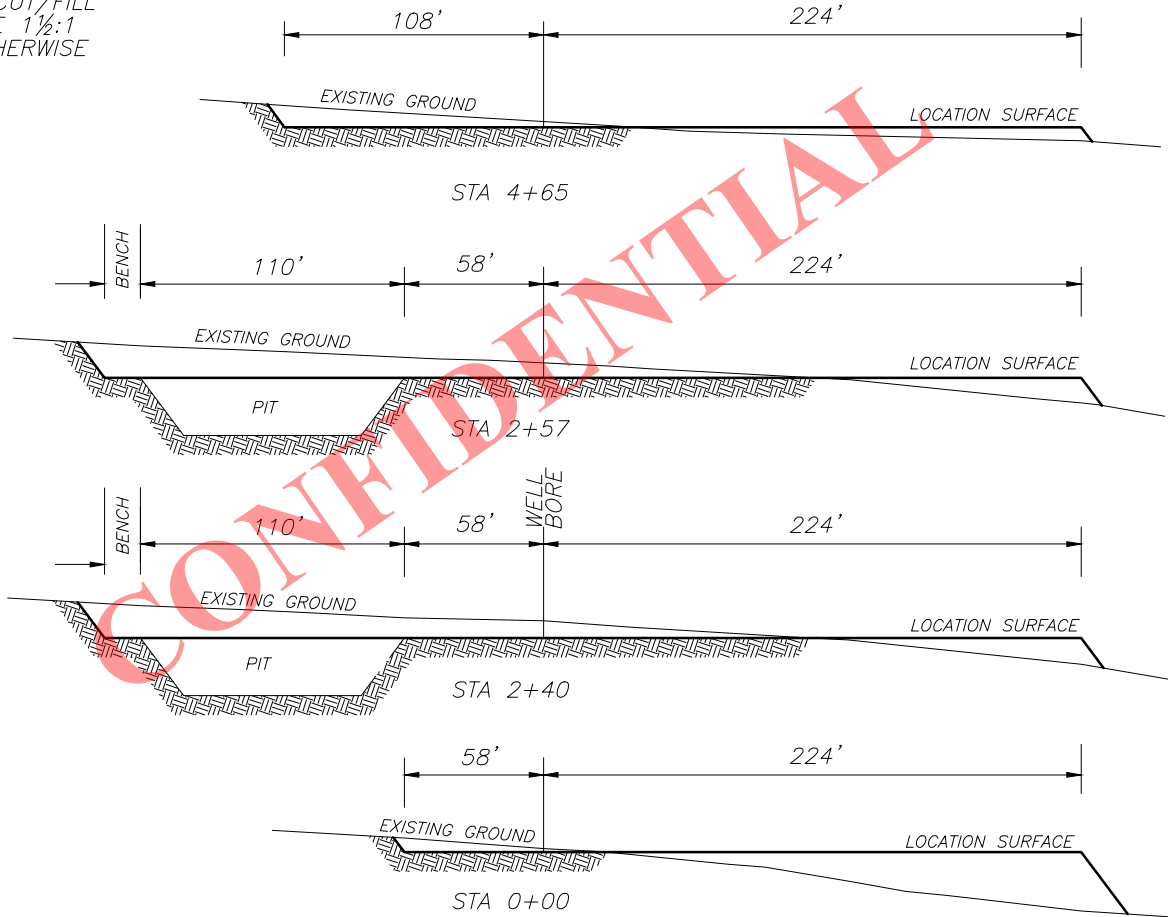
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EP ENERGY E&P COMPANY, L.P.**LOCATION LAYOUT FOR****WOODWARD 4-14C4****SECTION 14, T3S, R4W, U.S.B.&M.****275' FNL, 2315' FWL****FIGURE #2**

1"=40'
X-SECTION
SCALE

1"=80'

NOTE: ALL CUT/FILL
SLOPES ARE 1½:1
UNLESS OTHERWISE
NOTED

**APPROXIMATE YARDAGES**

TOTAL CUT (INCLUDING PIT) = 18,289 CU. YDS.

PIT CUT = 4955 CU. YDS.

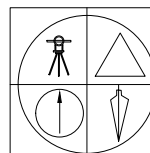
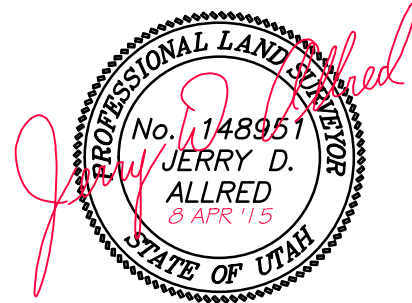
TOPSOIL STRIPPING: (6") = 3290 CU. YDS.

REMAINING LOCATION CUT = 10,044 CU. YDS.

TOTAL FILL = 10,044 CU. YDS.

LOCATION SURFACE GRAVEL=1653 CU. YDS. (4" DEEP)

ACCESS ROAD GRAVEL=659 CU. YDS.

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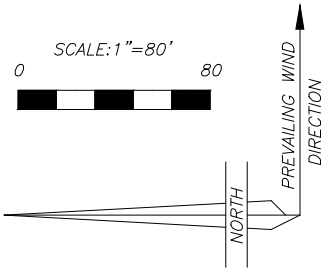
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EP ENERGY E&P COMPANY, L.P.**FIGURE #3**

LOCATION LAYOUT FOR
 WOODWARD 4-14C4
 SECTION 14, T3S, R4W, U.S.B.&M.
 275' FNL, 2315' FWL

SCALE: 1"=80'
 0 80

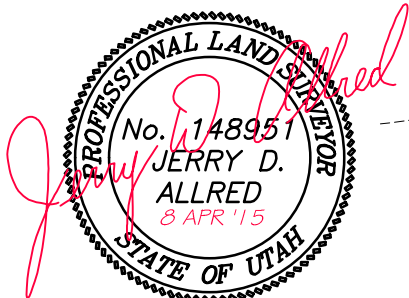


WELL PAD AREA
 BERMED AND USED
 FOR PRODUCTION

ENTIRE WELL PAD
 RECONTOURED BACK
 TO AVERAGE SLOPE
 FOR FINAL SURFACE
 RECLAMATION AFTER
 PRODUCTION

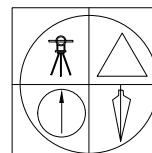
PIT AREA REGRADED
 BACK TO SLOPE FOR
 INTERIM RECLAMATION

CONFIDENTIAL



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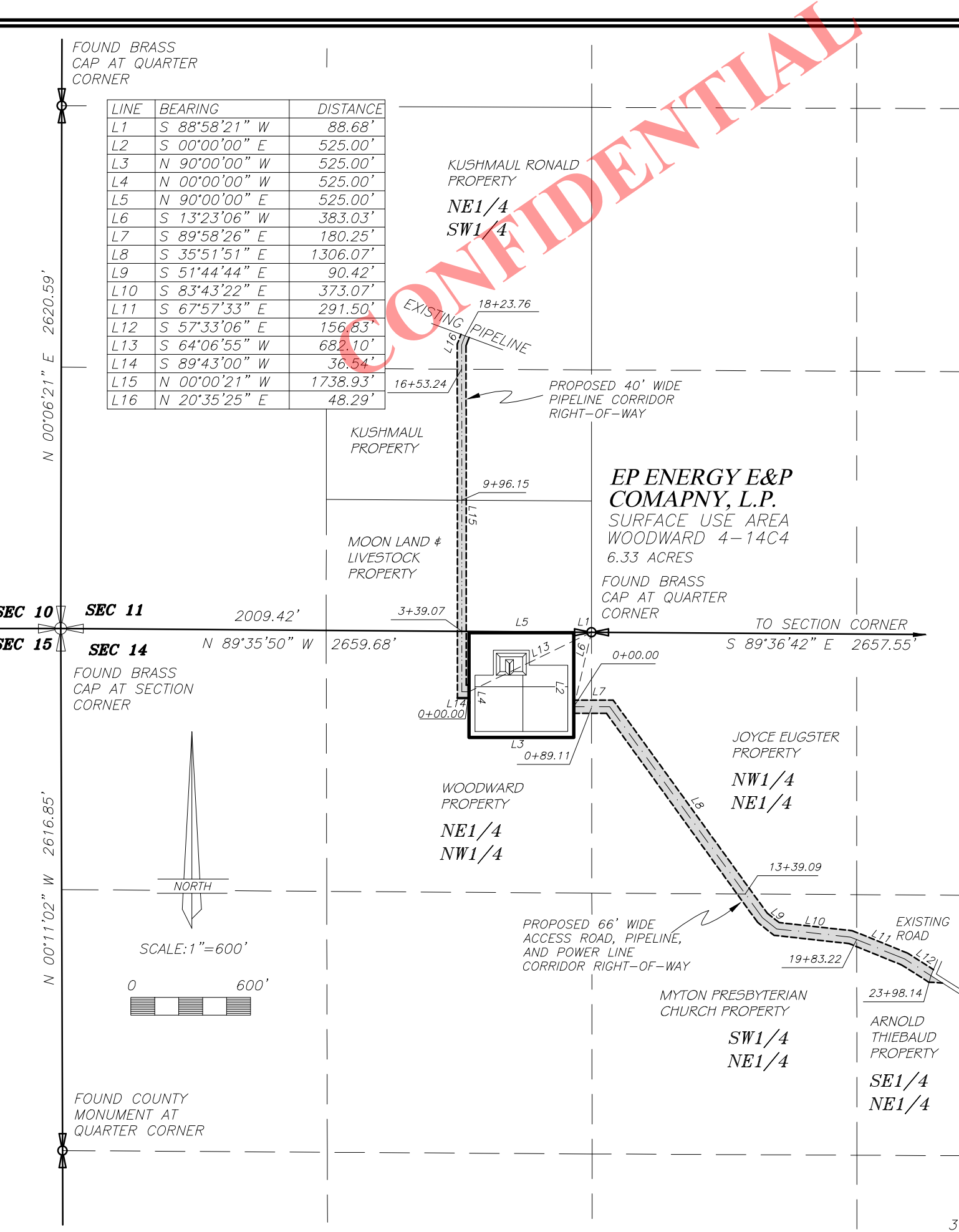
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LOCATION USE AREA AND ACCESS ROAD, POWER LINE, AND PIPELINE
CORRIDOR RIGHT-OF-WAY SURVEY FOR
EP ENERGY E&P COMPANY, L.P.
WOODWARD 4-14C4
SECTIONS 11 AND 14, T3S, R4W, U.S.B.&M.
DUCHESNE COUNTY, UTAH

USE AREA BOUNDARY DESCRIPTION

Commencing at the North Quarter Corner of Section 14, Township 3 South, Range 4 West of the Uintah Special Base and Meridian;
Thence South 88°58'21" West 88.68 feet to the TRUE POINT OF BEGINNING;
Thence South 00°00'00" East 525.00 feet;
Thence South 90°00'00" West 525.00 feet;
Thence North 00°00'00" East 525.00 feet;
Thence North 90°00'00" West 525.00 feet to the TRUE POINT OF BEGINNING, containing 6.33 acres.

ACCESS ROAD AND POWER LINE CORRIDOR RIGHT-OF-WAY DESCRIPTION

A 66 feet wide access road, pipeline, and power line corridor right-of-way over portions of Section 14, Township 3 South, Range 4 West of the Uintah Special Base and Meridian, the centerline of said right-of-way being further described as follows:
Commencing at the North Quarter Corner of Section 14, Township 3 South, Range 4 West of the Uintah Special Base and Meridian;
Thence South 13°23'06" West 383.03 feet to the TRUE POINT OF BEGINNING, said point being on the East line of the EP Energy E&P Co. Woodward 4-14C4 use area boundary;
Thence South 89°58'26" East 180.25 feet; Thence South 35°51'51" East 1306.07 feet;
Thence South 51°44'44" East 90.42 feet; Thence South 83°43'22" East 373.07 feet;
Thence South 67°57'33" East 291.50 feet; Thence South 57°33'06" East 156.83 feet to the West line of an existing road. Said right-of-way being 2398.14 feet in length with the side lines being shortened or elongated to intersect said use area boundary and existing road lines.

PIPELINE CORRIDOR RIGHT-OF-WAY DESCRIPTION

A 40 feet wide pipeline corridor right-of-way over portions of Sections 11 and 14, Township 3 South, Range 4 West of the Uintah Special Base and Meridian, the centerline of said right-of-way being further described as follows: Commencing at the North Quarter Corner of said Section 14;
Thence South 64°06'55" West 682.10 feet to the TRUE POINT OF BEGINNING, said point being on the West line of the EP Energy E&P Co. Woodward 4-14C4 use area boundary;
Thence South 89°43'00" West 36.54 feet; Thence North 00°00'21" West 1738.93;
Thence North 20°35'25" East 48.29 feet to the South line of an existing pipeline. Said right-of-way being 1823.76 feet in length with the side lines being shortened or elongated to intersect said use area boundary and existing pipelines.

SURVEYOR'S CERTIFICATE

This is to certify that this plat was prepared from the field notes and electronic data collector files of an actual survey made by me, or under my personal supervision, of the use area and access road, power line, and pipeline corridor right-of-way shown hereon, and that the monuments indicated were found or set during said survey, and that this plat accurately represents said survey to the best of my knowledge.

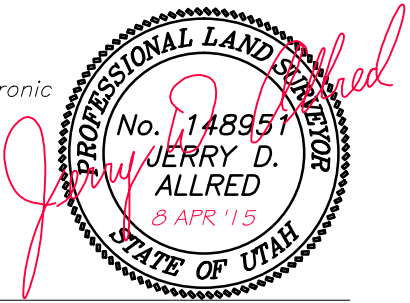
THIS SURVEY WAS PERFORMED USING GLOBAL POSITIONING SYSTEM PROCEDURES AND EQUIPMENT

THE BASIS OF BEARINGS IS GEODETIC NORTH DERIVED FROM G.P.S. OBSERVATIONS AT THE SECTION CORNER LOCATED AT LAT. 40°15'22.90258"N AND LONG. 110°23'21.19760"W USING THE UTAH STATE G.P.S. VIRTUAL REFERENCE STATION CONTROL NETWORK MAINTAINED AND OPERATED BY THE AUTOMATED GEOGRAPHIC REFERENCE CENTER

2 REV 16 JAN 2014
REV 27 AUG 2013
26 JUL 2013

3 REV 8 APR 2015

01-128-422

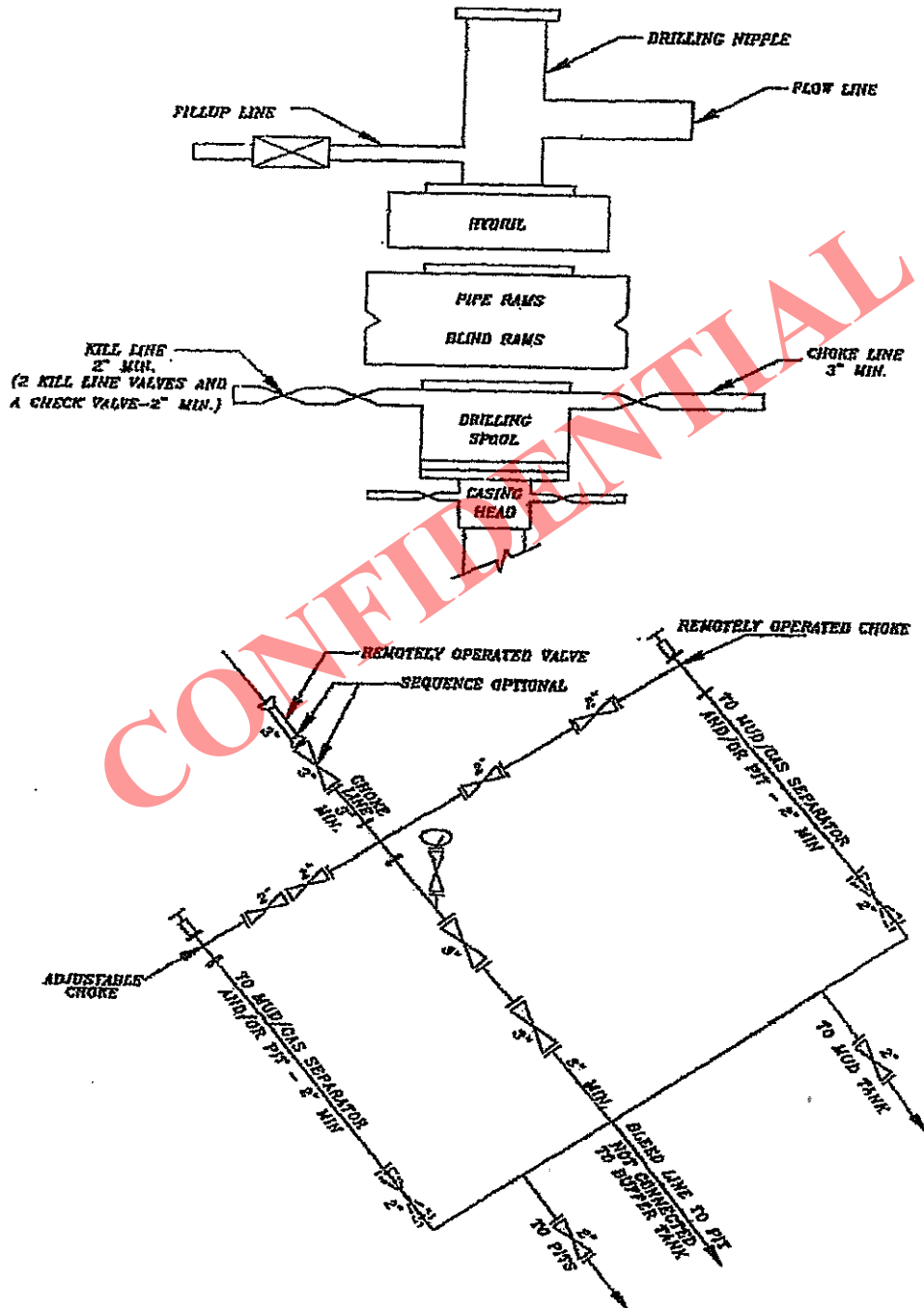


JERRY D. ALLRED, PROFESSIONAL LAND SURVEYOR,
CERTIFICATE NO. 148951 (UTAH)

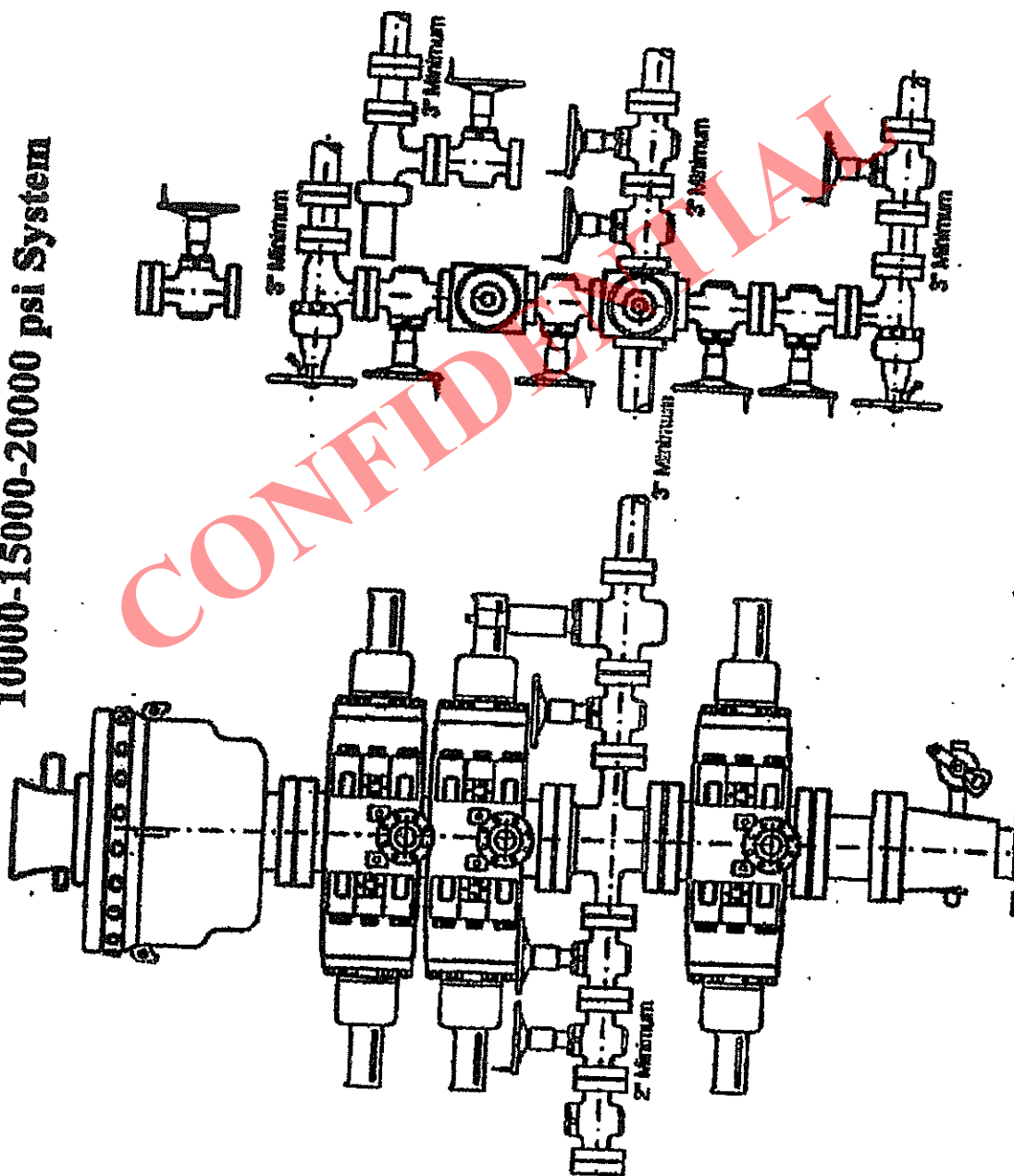
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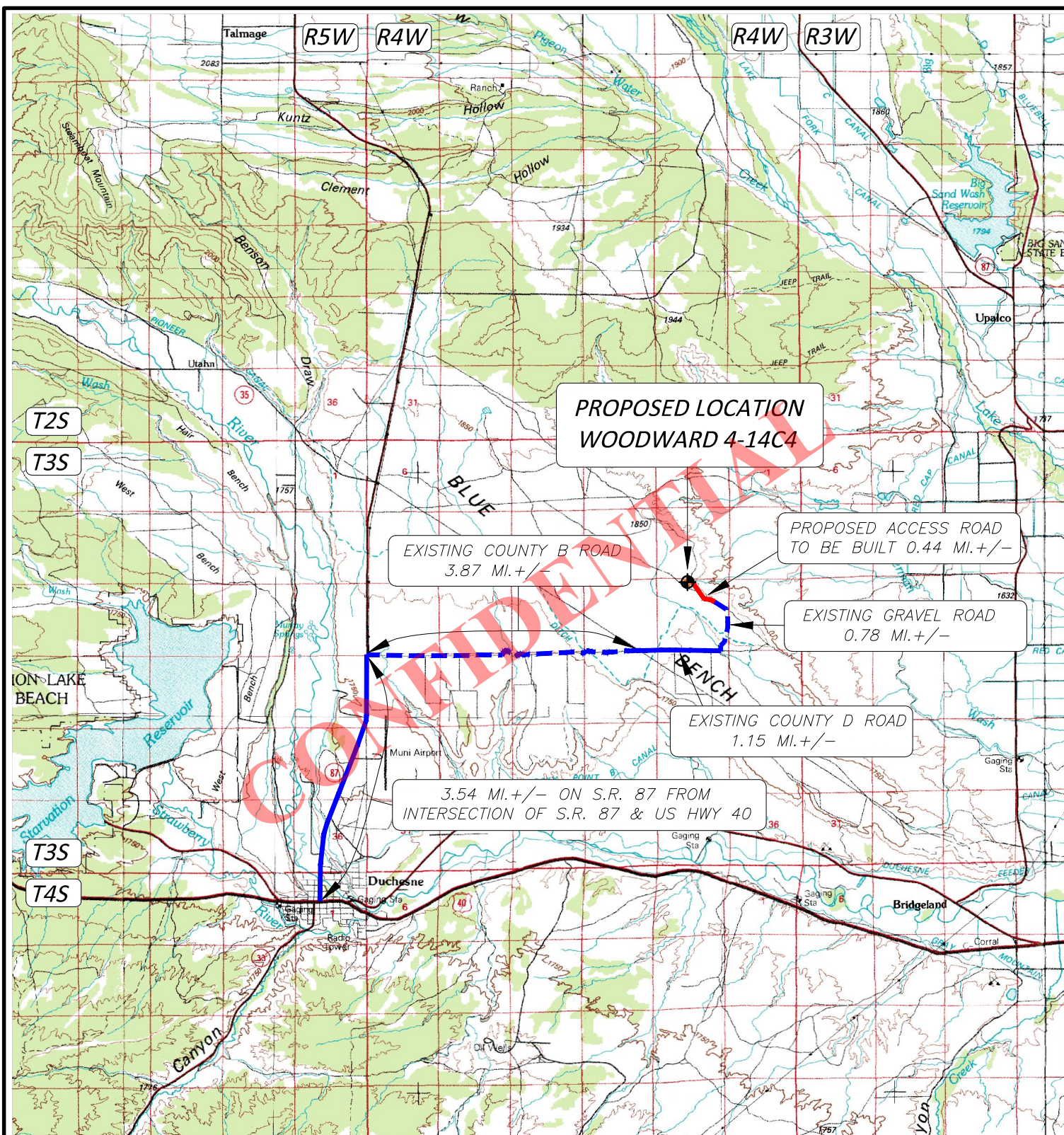
5M BOP STACK and CHOKE MANIFOLD SYSTEM



10000-15000-20000 psi System



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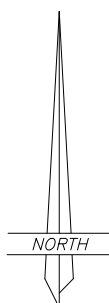
**LEGEND:**

◆ PROPOSED WELL LOCATION

01-128-422

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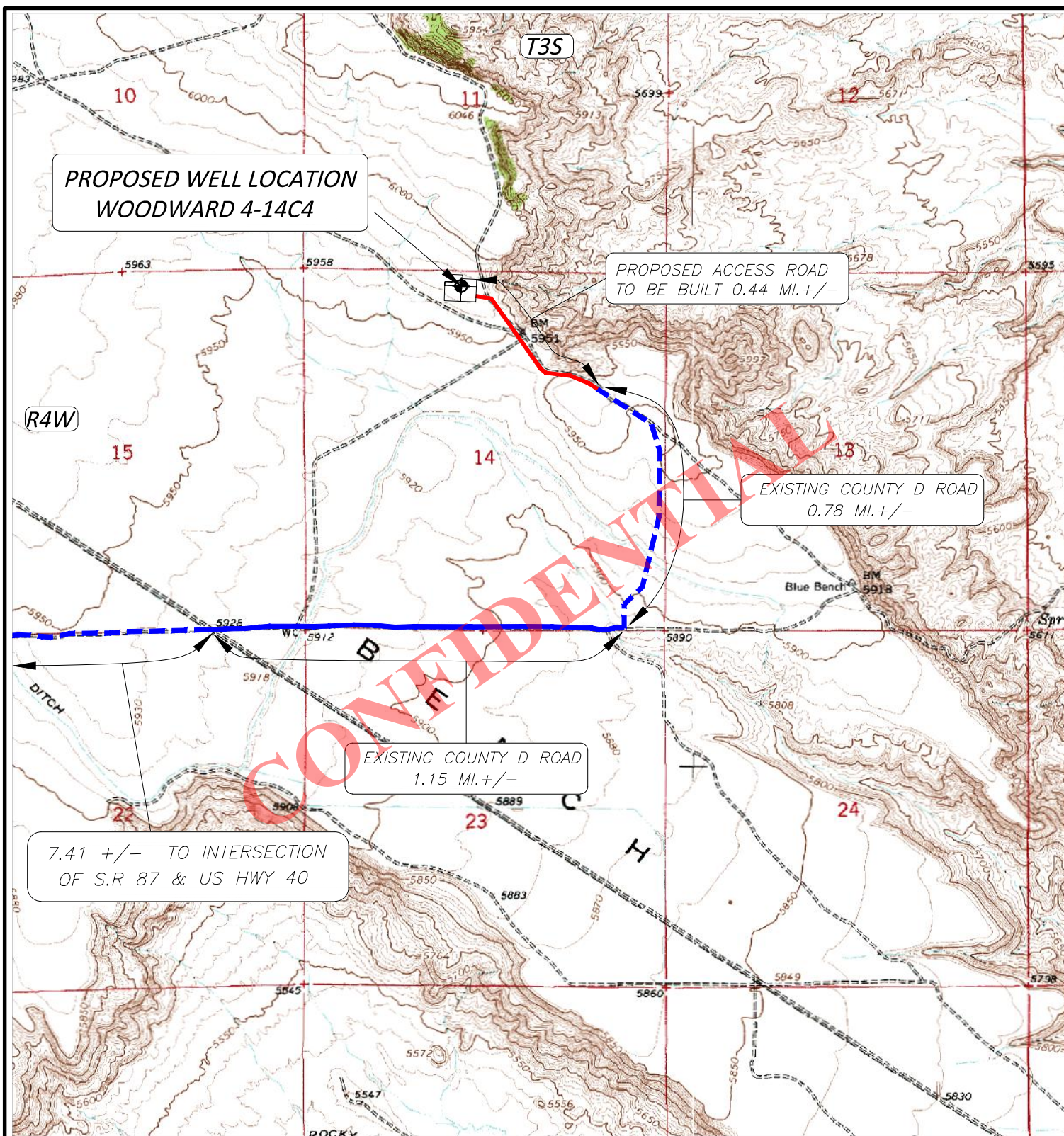
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**EP ENERGY E&P COMPANY, L.P.****WOODWARD 4-14C4****SECTION 14, T3S, R4W, U.S.B.&M.****275' FNL 2315' FWL****TOPOGRAPHIC MAP "A"**

SCALE: 1"=10,000'

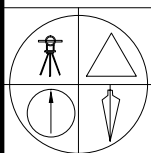
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**LEGEND:**

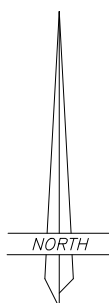
- PROPOSED WELL LOCATION**
- PROPOSED ACCESS ROAD**
- EXISTING GRAVEL ROAD**
- EXISTING PAVED ROAD**

01-128-422



JERRY D. ALLRED & ASSOCIATES
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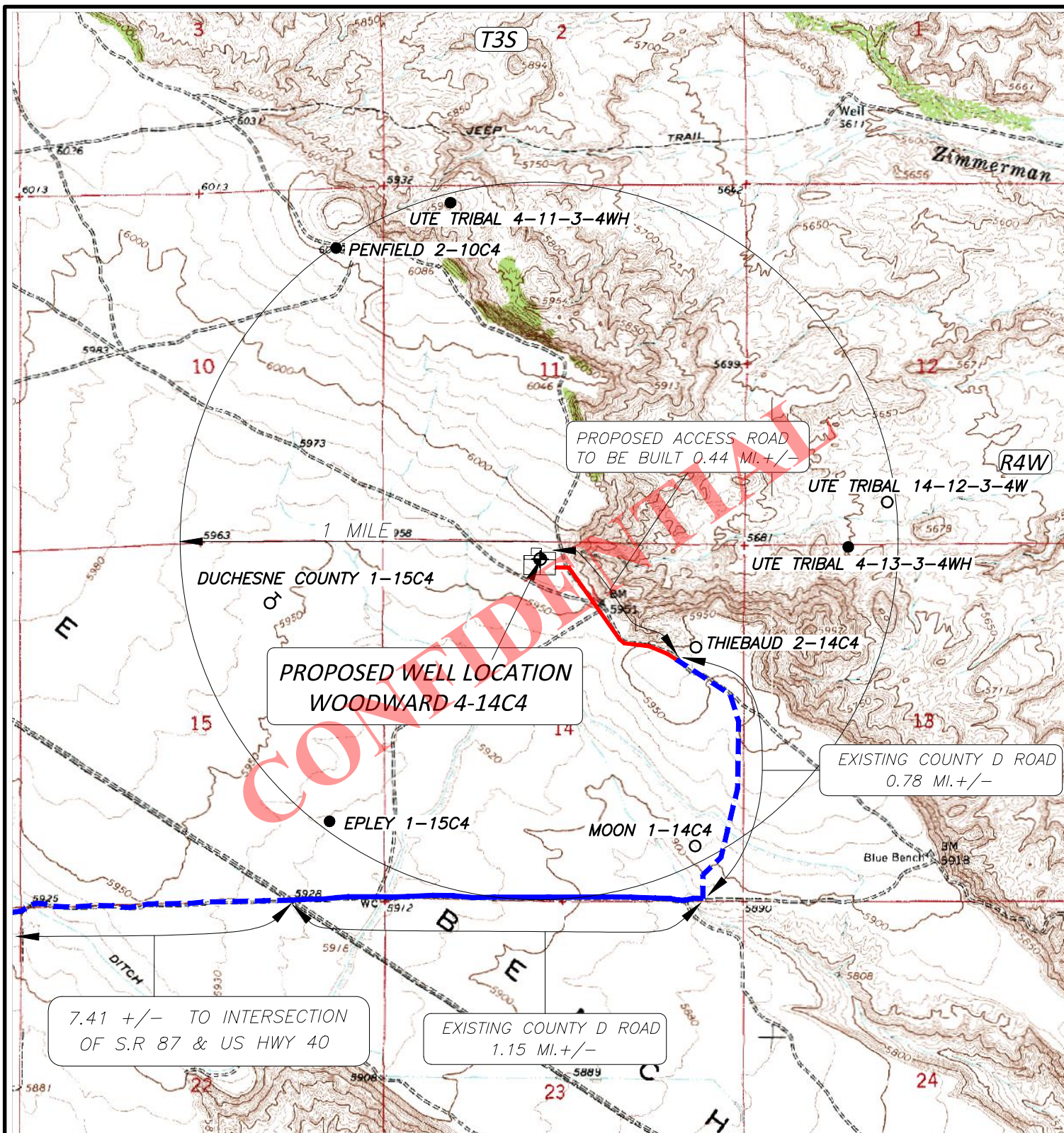
EP ENERGY E&P COMPANY, L.P.

WOODWARD 4-14C4
SECTION 14, T3S, R4W, U.S.B.&M.
275' FNL 2315' FWL

TOPOGRAPHIC MAP "B"

SCALE: 1"=2000'
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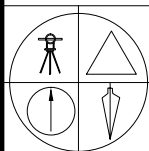
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**LEGEND:**

★ PROPOSED WELL LOCATION

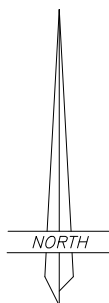
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01-128-422



JERRY D. ALLRED & ASSOCIATES
SURVEYING CONSULTANTS

1235 NORTH 700 EAST--P.O. BOX 975
DUCHESNE, UTAH 84021
(435) 738-5352



EP ENERGY E&P COMPANY, L.P.

WOODWARD 4-14C4
SECTION 14, T3S, R4W, U.S.B.&M.
275' FNL 2315' FWL

TOPOGRAPHIC MAP "C"

SCALE: 1"=2000'
REV 8 APR 2015

RECEIVED: April 08, 2015



EP Energy E&P Company, L.P.

Duchesne Co, UT

Woodward

4-14C4

Wellbore #1

Plan: Plan 2

Standard Planning Report

07 April, 2015

CONFIDENTIAL



**RYAN DIRECTIONAL
SERVICES**
A NABORS COMPANY



Azimuths to True North
Magnetic North: 11.09°

Magnetic Field
Strength: 51818.3snT
Dip Angle: 65.79°
Date: 4/7/2015
Model: BGGM2014

Project: Duchesne Co, UT
Site: Woodward
Well: 4-14C4
Wellbore: Wellbore #1
Design: Plan 2

Site Center Latitude: 40° 13' 38.98 N
Site Center Longitude: 110° 18' 16.52 W

Duchesne Co, UT

Positional Uncertainty: 0.00
Convergence: 0.77
Local North: True

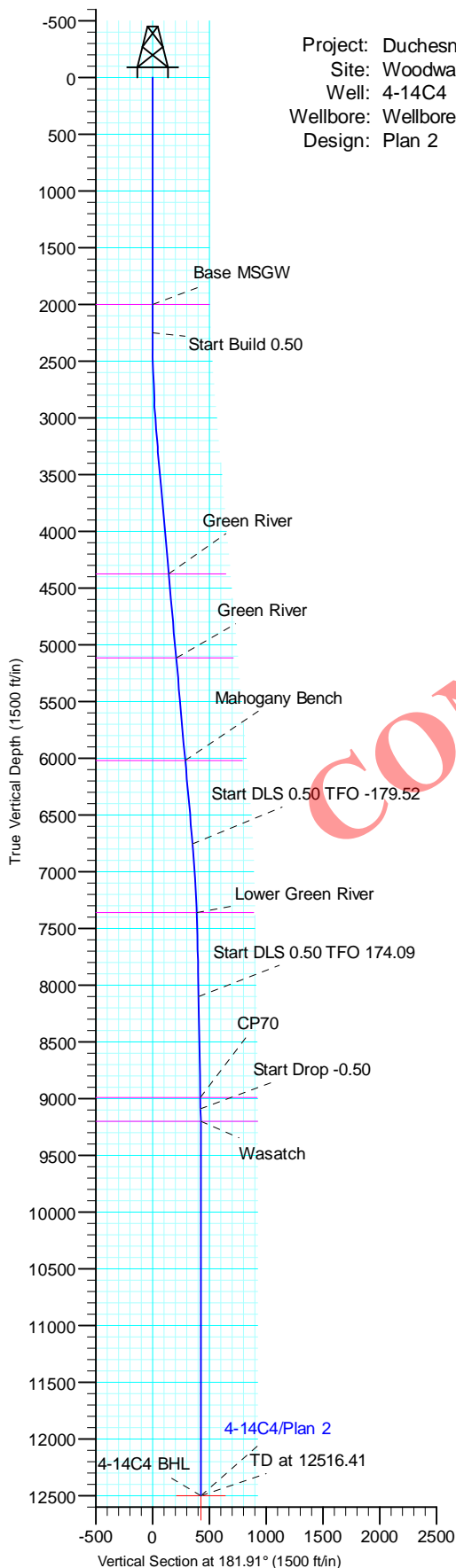
Geodetic System: US State Plane 1983

Datum: North American Datum 1983

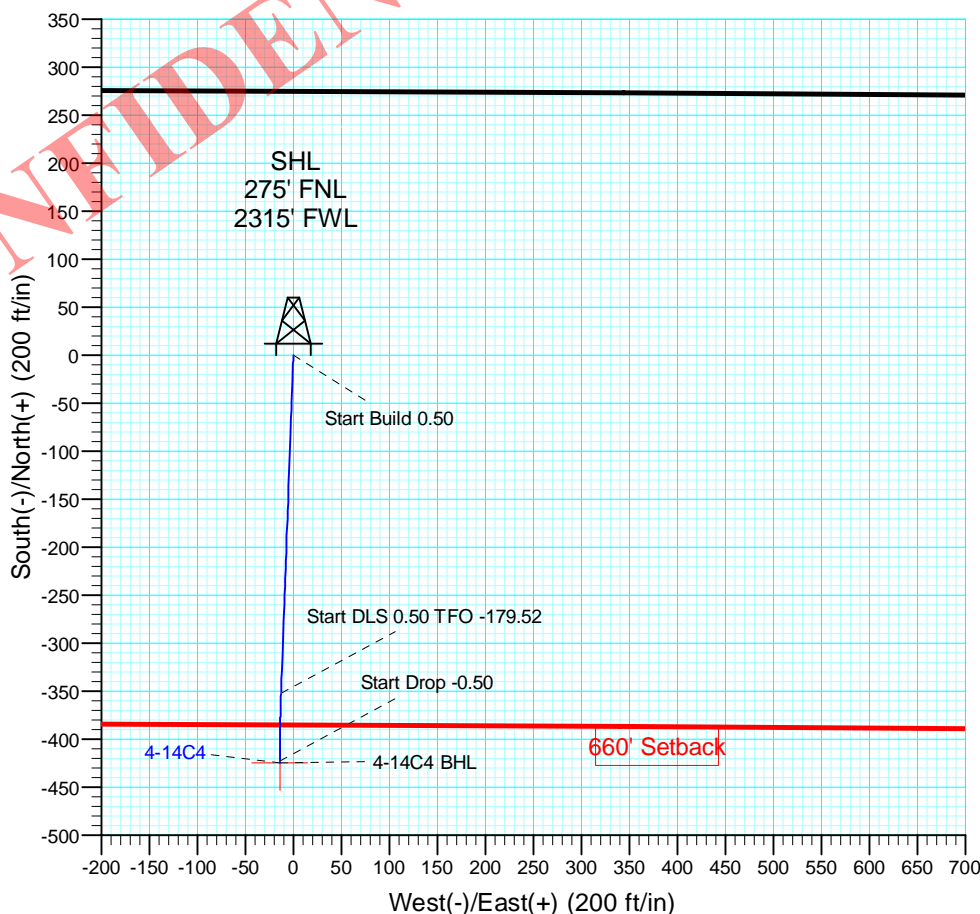
Ellipsoid: GRS 1980

Zone: Utah Central Zone

System Datum: Mean Sea Level



SECTION DETAILS										Target
MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	Vsect		
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
2250.00	0.00	0.00	2250.00	0.00	0.00	0.00	0.00	0.00		
3257.46	5.04	182.07	3256.16	-44.23	-1.60	0.50	182.07	44.26		
6768.64	5.04	182.07	6753.79	-352.32	-12.76	0.00	0.00	352.55		
7566.24	1.05	180.25	7550.09	-394.64	-14.06	0.50	-179.52	394.89		
8116.24	1.05	180.25	8100.00	-404.72	-14.10	0.00	0.00	404.97		
8117.02	1.05	180.27	8100.78	-404.73	-14.10	0.50	174.09	404.98		
9107.19	1.05	180.27	9090.79	-422.81	-14.19	0.00	0.00	423.05		
9316.41	0.00	0.00	9300.00	-424.72	-14.19	0.50	180.00	424.96		
12516.41	0.00	0.00	12500.00	-424.72	-14.19	0.00	0.00	424.96		4-14C4 BHL



ANNOTATIONS									
TVD	MD	Inc	Azi	+N/-S	+E/-W	Vsect	Departure	Annotation	
2250.00	2250.00	0.00	0.00	0.00	0.00	0.00	0.00	Start Build 0.50	
6753.78	6768.64	5.04	182.07	-352.32	-12.76	352.55	352.55	Start DLS 0.50 TFO -179.52	
8100.00	8116.24	1.05	180.25	-404.72	-14.10	404.97	404.97	Start DLS 0.50 TFO 174.09	
9090.79	9107.19	1.05	180.27	-422.81	-14.19	423.05	423.06	Start Drop -0.50	
12500.00	12516.41	0.00	0.00	-424.72	-14.19	424.96	424.97	TD at 12516.41	



RECEIVED: April 08, 2015

Database:	RYANUS R5000	Local Co-ordinate Reference:	Well 4-14C4
Company:	EP Energy E&P Company, L.P.	TVD Reference:	WELL @ 5990.00ft (Original Well Elev)
Project:	Duchesne Co, UT	MD Reference:	WELL @ 5990.00ft (Original Well Elev)
Site:	Woodward	North Reference:	True
Well:	4-14C4	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan 2		

Project	Duchesne Co, UT		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	Utah Central Zone		

Site		Woodward			
Site Position:		Northing:	7,253,821.88 usft	Latitude:	40° 13' 38.98 N
From:	Lat/Long	Easting:	1,974,176.81 usft	Longitude:	110° 18' 16.52 W
Position Uncertainty:	0.00 ft	Slot Radius:	13-3/16 "	Grid Convergence:	0.77 °

Well	4-14C4					
Well Position	+N/-S	0.00 ft	Northing:	7,253,821.88 usft	Latitude:	40° 13' 38.98 N
	+E/-W	0.00 ft	Easting:	1,974,176.81 usft	Longitude:	110° 18' 16.52 W
Position Uncertainty		2.00 ft	Wellhead Elevation:	0.00 ft	Ground Level:	5,973.00 ft

Wellbore	Wellbore #1				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	BGGM2014	4/7/2015	11.09	65.79	51,818

Design	Plan 2			
Audit Notes:				
Version:	Phase:	PLAN	Tie On Depth:	0.00
Vertical Section:	Depth From (TVD)	+N/-S (ft)	+E/-W (ft)	Direction (°)
	0.00	0.00	0.00	181.91

Plan Sections										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	TFO (°)	Target
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
2,250.00	0.00	0.00	2,250.00	0.00	0.00	0.00	0.00	0.00	0.00	
3,257.46	5.04	182.07	3,256.16	-44.23	-1.60	0.50	0.50	0.00	182.07	
6,768.64	5.04	182.07	6,753.79	-352.32	-12.76	0.00	0.00	0.00	0.00	
7,566.24	1.05	180.25	7,550.09	-394.64	-14.06	0.50	-0.50	-0.23	-179.52	
8,116.24	1.05	180.25	8,100.00	-404.72	-14.10	0.00	0.00	0.00	0.00	
8,117.02	1.05	180.27	8,100.78	-404.73	-14.10	0.50	-0.50	2.82	174.09	
9,107.19	1.05	180.27	9,090.79	-422.81	-14.19	0.00	0.00	0.00	0.00	
9,316.41	0.00	0.00	9,300.00	-424.72	-14.19	0.50	-0.50	0.00	180.00	
12,516.41	0.00	0.00	12,500.00	-424.72	-14.19	0.00	0.00	0.00	0.00	4-14C4 BHL

Database:	RYANUS R5000	Local Co-ordinate Reference:	Well 4-14C4
Company:	EP Energy E&P Company, L.P.	TVD Reference:	WELL @ 5990.00ft (Original Well Elev)
Project:	Duchesne Co, UT	MD Reference:	WELL @ 5990.00ft (Original Well Elev)
Site:	Woodward	North Reference:	True
Well:	4-14C4	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan 2		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
100.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00
200.00	0.00	0.00	200.00	0.00	0.00	0.00	0.00	0.00	0.00
300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00	0.00	0.00
400.00	0.00	0.00	400.00	0.00	0.00	0.00	0.00	0.00	0.00
500.00	0.00	0.00	500.00	0.00	0.00	0.00	0.00	0.00	0.00
600.00	0.00	0.00	600.00	0.00	0.00	0.00	0.00	0.00	0.00
700.00	0.00	0.00	700.00	0.00	0.00	0.00	0.00	0.00	0.00
800.00	0.00	0.00	800.00	0.00	0.00	0.00	0.00	0.00	0.00
900.00	0.00	0.00	900.00	0.00	0.00	0.00	0.00	0.00	0.00
1,000.00	0.00	0.00	1,000.00	0.00	0.00	0.00	0.00	0.00	0.00
1,100.00	0.00	0.00	1,100.00	0.00	0.00	0.00	0.00	0.00	0.00
1,200.00	0.00	0.00	1,200.00	0.00	0.00	0.00	0.00	0.00	0.00
1,300.00	0.00	0.00	1,300.00	0.00	0.00	0.00	0.00	0.00	0.00
1,400.00	0.00	0.00	1,400.00	0.00	0.00	0.00	0.00	0.00	0.00
1,500.00	0.00	0.00	1,500.00	0.00	0.00	0.00	0.00	0.00	0.00
1,600.00	0.00	0.00	1,600.00	0.00	0.00	0.00	0.00	0.00	0.00
1,700.00	0.00	0.00	1,700.00	0.00	0.00	0.00	0.00	0.00	0.00
1,800.00	0.00	0.00	1,800.00	0.00	0.00	0.00	0.00	0.00	0.00
1,900.00	0.00	0.00	1,900.00	0.00	0.00	0.00	0.00	0.00	0.00
2,000.00	0.00	0.00	2,000.00	0.00	0.00	0.00	0.00	0.00	0.00
Base MSGW									
2,100.00	0.00	0.00	2,100.00	0.00	0.00	0.00	0.00	0.00	0.00
2,200.00	0.00	0.00	2,200.00	0.00	0.00	0.00	0.00	0.00	0.00
2,250.00	0.00	0.00	2,250.00	0.00	0.00	0.00	0.00	0.00	0.00
Start Build 0.50									
2,300.00	0.25	182.07	2,300.00	-0.11	0.00	0.11	0.50	0.50	0.00
2,400.00	0.75	182.07	2,400.00	-0.98	-0.04	0.98	0.50	0.50	0.00
2,500.00	1.25	182.07	2,499.98	-2.73	-0.10	2.73	0.50	0.50	0.00
2,600.00	1.75	182.07	2,599.95	-5.34	-0.19	5.34	0.50	0.50	0.00
2,700.00	2.25	182.07	2,699.88	-8.83	-0.32	8.83	0.50	0.50	0.00
2,800.00	2.75	182.07	2,799.79	-13.19	-0.48	13.20	0.50	0.50	0.00
2,900.00	3.25	182.07	2,899.65	-18.42	-0.67	18.43	0.50	0.50	0.00
3,000.00	3.75	182.07	2,999.46	-24.52	-0.89	24.53	0.50	0.50	0.00
3,100.00	4.25	182.07	3,099.22	-31.49	-1.14	31.51	0.50	0.50	0.00
3,200.00	4.75	182.07	3,198.91	-39.33	-1.42	39.36	0.50	0.50	0.00
3,257.46	5.04	182.07	3,256.16	-44.23	-1.60	44.26	0.50	0.50	0.00
3,300.00	5.04	182.07	3,298.54	-47.96	-1.74	47.99	0.00	0.00	0.00
3,400.00	5.04	182.07	3,398.15	-56.74	-2.05	56.77	0.00	0.00	0.00
3,500.00	5.04	182.07	3,497.77	-65.51	-2.37	65.55	0.00	0.00	0.00
3,600.00	5.04	182.07	3,597.38	-74.29	-2.69	74.33	0.00	0.00	0.00
3,700.00	5.04	182.07	3,696.99	-83.06	-3.01	83.11	0.00	0.00	0.00
3,800.00	5.04	182.07	3,796.61	-91.84	-3.33	91.90	0.00	0.00	0.00
3,900.00	5.04	182.07	3,896.22	-100.61	-3.64	100.68	0.00	0.00	0.00
4,000.00	5.04	182.07	3,995.83	-109.38	-3.96	109.46	0.00	0.00	0.00
4,100.00	5.04	182.07	4,095.45	-118.16	-4.28	118.24	0.00	0.00	0.00
4,200.00	5.04	182.07	4,195.06	-126.93	-4.60	127.02	0.00	0.00	0.00
4,300.00	5.04	182.07	4,294.68	-135.71	-4.91	135.80	0.00	0.00	0.00
4,380.64	5.04	182.07	4,375.00	-142.78	-5.17	142.88	0.00	0.00	0.00
Green River									
4,400.00	5.04	182.07	4,394.29	-144.48	-5.23	144.58	0.00	0.00	0.00
4,500.00	5.04	182.07	4,493.90	-153.26	-5.55	153.36	0.00	0.00	0.00
4,600.00	5.04	182.07	4,593.52	-162.03	-5.87	162.14	0.00	0.00	0.00

Database:	RYANUS R5000	Local Co-ordinate Reference:	Well 4-14C4
Company:	EP Energy E&P Company, L.P.	TVD Reference:	WELL @ 5990.00ft (Original Well Elev)
Project:	Duchesne Co, UT	MD Reference:	WELL @ 5990.00ft (Original Well Elev)
Site:	Woodward	North Reference:	True
Well:	4-14C4	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan 2		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
4,700.00	5.04	182.07	4,693.13	-170.81	-6.18	170.92	0.00	0.00	0.00
4,800.00	5.04	182.07	4,792.75	-179.58	-6.50	179.70	0.00	0.00	0.00
4,900.00	5.04	182.07	4,892.36	-188.36	-6.82	188.48	0.00	0.00	0.00
5,000.00	5.04	182.07	4,991.97	-197.13	-7.14	197.26	0.00	0.00	0.00
5,100.00	5.04	182.07	5,091.59	-205.91	-7.46	206.04	0.00	0.00	0.00
5,122.50	5.04	182.07	5,114.00	-207.88	-7.53	208.02	0.00	0.00	0.00
Green River									
5,200.00	5.04	182.07	5,191.20	-214.68	-7.77	214.82	0.00	0.00	0.00
5,300.00	5.04	182.07	5,290.81	-223.46	-8.09	223.60	0.00	0.00	0.00
5,400.00	5.04	182.07	5,390.43	-232.23	-8.41	232.38	0.00	0.00	0.00
5,500.00	5.04	182.07	5,490.04	-241.00	-8.73	241.16	0.00	0.00	0.00
5,600.00	5.04	182.07	5,589.66	-249.78	-9.04	249.94	0.00	0.00	0.00
5,700.00	5.04	182.07	5,689.27	-258.55	-9.36	258.72	0.00	0.00	0.00
5,800.00	5.04	182.07	5,788.88	-267.33	-9.68	267.50	0.00	0.00	0.00
5,900.00	5.04	182.07	5,888.50	-276.10	-10.00	276.28	0.00	0.00	0.00
6,000.00	5.04	182.07	5,988.11	-284.88	-10.31	285.06	0.00	0.00	0.00
6,032.01	5.04	182.07	6,020.00	-287.69	-10.42	287.87	0.00	0.00	0.00
Mahogany Bench									
6,100.00	5.04	182.07	6,087.72	-293.65	-10.63	293.84	0.00	0.00	0.00
6,200.00	5.04	182.07	6,187.34	-302.43	-10.95	302.62	0.00	0.00	0.00
6,300.00	5.04	182.07	6,286.95	-311.20	-11.27	311.40	0.00	0.00	0.00
6,400.00	5.04	182.07	6,386.57	-319.98	-11.59	320.18	0.00	0.00	0.00
6,500.00	5.04	182.07	6,486.18	-328.75	-11.90	328.97	0.00	0.00	0.00
6,600.00	5.04	182.07	6,585.79	-337.53	-12.22	337.75	0.00	0.00	0.00
6,700.00	5.04	182.07	6,685.41	-346.30	-12.54	346.53	0.00	0.00	0.00
6,768.64	5.04	182.07	6,753.78	-352.32	-12.76	352.55	0.00	0.00	0.00
Start DLS 0.50 TFO -179.52									
6,800.00	4.88	182.06	6,785.02	-355.03	-12.85	355.26	0.50	-0.50	-0.05
6,900.00	4.38	182.00	6,884.70	-363.10	-13.14	363.34	0.50	-0.50	-0.06
7,000.00	3.88	181.93	6,984.44	-370.30	-13.39	370.54	0.50	-0.50	-0.07
7,100.00	3.38	181.84	7,084.24	-376.63	-13.60	376.87	0.50	-0.50	-0.09
7,200.00	2.88	181.71	7,184.09	-382.09	-13.77	382.33	0.50	-0.50	-0.12
7,300.00	2.38	181.54	7,283.98	-386.67	-13.90	386.92	0.50	-0.50	-0.18
7,376.07	2.00	181.34	7,360.00	-389.58	-13.97	389.83	0.50	-0.50	-0.25
Lower Green River									
7,400.00	1.88	181.27	7,383.91	-390.39	-13.99	390.64	0.50	-0.50	-0.32
7,500.00	1.38	180.80	7,483.87	-393.24	-14.04	393.49	0.50	-0.50	-0.47
7,566.24	1.05	180.25	7,550.09	-394.64	-14.06	394.89	0.50	-0.50	-0.83
7,600.00	1.05	180.25	7,583.85	-395.26	-14.06	395.51	0.00	0.00	0.00
7,700.00	1.05	180.25	7,683.83	-397.09	-14.07	397.34	0.00	0.00	0.00
7,800.00	1.05	180.25	7,783.82	-398.93	-14.07	399.17	0.00	0.00	0.00
7,900.00	1.05	180.25	7,883.80	-400.76	-14.08	401.00	0.00	0.00	0.00
8,000.00	1.05	180.25	7,983.78	-402.59	-14.09	402.84	0.00	0.00	0.00
8,100.00	1.05	180.25	8,083.77	-404.42	-14.10	404.67	0.00	0.00	0.00
8,116.24	1.05	180.25	8,100.00	-404.72	-14.10	404.97	0.00	0.00	0.00
Start DLS 0.50 TFO 174.09									
8,117.02	1.05	180.27	8,100.78	-404.73	-14.10	404.98	0.50	-0.50	2.83
8,200.00	1.05	180.27	8,183.75	-406.25	-14.11	406.49	0.00	0.00	0.00
8,300.00	1.05	180.27	8,283.73	-408.07	-14.12	408.32	0.00	0.00	0.00
8,400.00	1.05	180.27	8,383.72	-409.90	-14.12	410.14	0.00	0.00	0.00
8,500.00	1.05	180.27	8,483.70	-411.73	-14.13	411.97	0.00	0.00	0.00
8,600.00	1.05	180.27	8,583.68	-413.55	-14.14	413.79	0.00	0.00	0.00
8,700.00	1.05	180.27	8,683.67	-415.38	-14.15	415.62	0.00	0.00	0.00
8,800.00	1.05	180.27	8,783.65	-417.20	-14.16	417.44	0.00	0.00	0.00

Database:	RYANUS R5000	Local Co-ordinate Reference:	Well 4-14C4
Company:	EP Energy E&P Company, L.P.	TVD Reference:	WELL @ 5990.00ft (Original Well Elev)
Project:	Duchesne Co, UT	MD Reference:	WELL @ 5990.00ft (Original Well Elev)
Site:	Woodward	North Reference:	True
Well:	4-14C4	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan 2		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
8,900.00	1.05	180.27	8,883.63	-419.03	-14.17	419.27	0.00	0.00	0.00
9,000.00	1.05	180.27	8,983.62	-420.85	-14.18	421.09	0.00	0.00	0.00
9,006.39	1.05	180.27	8,990.00	-420.97	-14.18	421.21	0.00	0.00	0.00
CP70									
9,107.19	1.05	180.27	9,090.79	-422.81	-14.19	423.05	0.00	0.00	0.00
Start Drop -0.50									
9,200.00	0.58	180.27	9,183.59	-424.13	-14.19	424.37	0.50	-0.50	0.00
9,216.41	0.50	180.27	9,200.00	-424.29	-14.19	424.52	0.50	-0.50	0.00
Wasatch									
9,300.00	0.08	180.27	9,283.59	-424.71	-14.19	424.95	0.50	-0.50	0.00
9,316.41	0.00	0.00	9,300.00	-424.72	-14.19	424.96	0.50	-0.50	0.00
9,400.00	0.00	0.00	9,383.59	-424.72	-14.19	424.96	0.00	0.00	0.00
9,500.00	0.00	0.00	9,483.59	-424.72	-14.19	424.96	0.00	0.00	0.00
9,600.00	0.00	0.00	9,583.59	-424.72	-14.19	424.96	0.00	0.00	0.00
9,700.00	0.00	0.00	9,683.59	-424.72	-14.19	424.96	0.00	0.00	0.00
9,800.00	0.00	0.00	9,783.59	-424.72	-14.19	424.96	0.00	0.00	0.00
9,900.00	0.00	0.00	9,883.59	-424.72	-14.19	424.96	0.00	0.00	0.00
10,000.00	0.00	0.00	9,983.59	-424.72	-14.19	424.96	0.00	0.00	0.00
10,100.00	0.00	0.00	10,083.59	-424.72	-14.19	424.96	0.00	0.00	0.00
10,200.00	0.00	0.00	10,183.59	-424.72	-14.19	424.96	0.00	0.00	0.00
10,300.00	0.00	0.00	10,283.59	-424.72	-14.19	424.96	0.00	0.00	0.00
10,400.00	0.00	0.00	10,383.59	-424.72	-14.19	424.96	0.00	0.00	0.00
10,500.00	0.00	0.00	10,483.59	-424.72	-14.19	424.96	0.00	0.00	0.00
10,600.00	0.00	0.00	10,583.59	-424.72	-14.19	424.96	0.00	0.00	0.00
10,700.00	0.00	0.00	10,683.59	-424.72	-14.19	424.96	0.00	0.00	0.00
10,800.00	0.00	0.00	10,783.59	-424.72	-14.19	424.96	0.00	0.00	0.00
10,900.00	0.00	0.00	10,883.59	-424.72	-14.19	424.96	0.00	0.00	0.00
11,000.00	0.00	0.00	10,983.59	-424.72	-14.19	424.96	0.00	0.00	0.00
11,100.00	0.00	0.00	11,083.59	-424.72	-14.19	424.96	0.00	0.00	0.00
11,200.00	0.00	0.00	11,183.59	-424.72	-14.19	424.96	0.00	0.00	0.00
11,300.00	0.00	0.00	11,283.59	-424.72	-14.19	424.96	0.00	0.00	0.00
11,400.00	0.00	0.00	11,383.59	-424.72	-14.19	424.96	0.00	0.00	0.00
11,500.00	0.00	0.00	11,483.59	-424.72	-14.19	424.96	0.00	0.00	0.00
11,600.00	0.00	0.00	11,583.59	-424.72	-14.19	424.96	0.00	0.00	0.00
11,700.00	0.00	0.00	11,683.59	-424.72	-14.19	424.96	0.00	0.00	0.00
11,800.00	0.00	0.00	11,783.59	-424.72	-14.19	424.96	0.00	0.00	0.00
11,900.00	0.00	0.00	11,883.59	-424.72	-14.19	424.96	0.00	0.00	0.00
12,000.00	0.00	0.00	11,983.59	-424.72	-14.19	424.96	0.00	0.00	0.00
12,100.00	0.00	0.00	12,083.59	-424.72	-14.19	424.96	0.00	0.00	0.00
12,200.00	0.00	0.00	12,183.59	-424.72	-14.19	424.96	0.00	0.00	0.00
12,300.00	0.00	0.00	12,283.59	-424.72	-14.19	424.96	0.00	0.00	0.00
12,400.00	0.00	0.00	12,383.59	-424.72	-14.19	424.96	0.00	0.00	0.00
12,500.00	0.00	0.00	12,483.59	-424.72	-14.19	424.96	0.00	0.00	0.00
12,516.41	0.00	0.00	12,500.00	-424.72	-14.19	424.96	0.00	0.00	0.00
TD at 12516.41									

Database:	RYANUS R5000	Local Co-ordinate Reference:	Well 4-14C4
Company:	EP Energy E&P Company, L.P.	TVD Reference:	WELL @ 5990.00ft (Original Well Elev)
Project:	Duchesne Co, UT	MD Reference:	WELL @ 5990.00ft (Original Well Elev)
Site:	Woodward	North Reference:	True
Well:	4-14C4	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan 2		

Design Targets									
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (usft)	Easting (usft)	Latitude	Longitude
4-14C4 BHL - hit/miss target - Shape	0.00	0.00	12,500.00	-424.72	-14.19	7,253,397.01	1,974,168.30	40° 13' 34.79 N	110° 18' 16.70 W
- plan hits target center - Point									

Formations						
Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)	
2,000.00	2,000.00	Base MSGW		0.00		
4,380.64	4,375.00	Green River		0.00		
5,122.50	5,114.00	Green River		0.00		
6,032.01	6,020.00	Mahogany Bench		0.00		
7,376.07	7,360.00	Lower Green River		0.00		
9,006.39	8,990.00	CP70		0.00		
9,216.41	9,200.00	Wasatch		0.00		

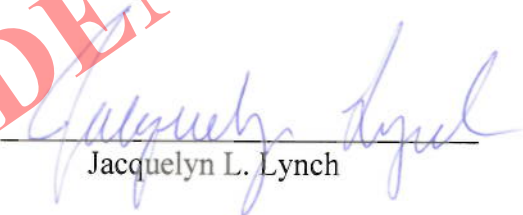
Plan Annotations				
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment
		+N/-S (ft)	+E/-W (ft)	
2,250.00	2,250.00	0.00	0.00	Start Build 0.50
6,768.64	6,753.78	-352.32	-12.76	Start DLS 0.50 TFO -179.52
8,116.24	8,100.00	-404.72	-14.10	Start DLS 0.50 TFO 174.09
9,107.19	9,090.79	-422.81	-14.19	Start Drop -0.50
12,516.41	12,500.00	-424.72	-14.19	TD at 12516.41

AFFIDAVIT OF DAMAGE SETTLEMENT AND RELEASE

Jacquelyn L. Lynch personally appeared before me, and, being duly sworn, deposes and says:

1. My name is Jacquelyn L. Lynch. I am a Landman for EP Energy E&P Company, L.P., whose address is 1001 Louisiana St., Houston, Texas 77002 ("EP Energy").
2. EP Energy is the operator of the proposed Woodward 4-14C4 well (the "Well") to be located in the NE/4NW/4 of Section 14, Township 3 South, Range 4 West, USM, Duchesne County, Utah (the "Drillsite Location"). The surface owner of the Drillsite Location is Caroline Beth Woodward, whose address is 1087 North 200 East, Orem, Utah 84057 (the "Surface Owner"). The Surface Owner's telephone number is (801) 225-6468.
3. EP Energy and the Surface Owner have entered into a Damage Settlement and Release Agreement dated August 29, 2013, to cover any and all injuries or damages of every character and description sustained by the Surface Owner or Surface Owner's property as a result of operations associated with the drilling of the Well.

FURTHER AFFIANT SAYETH NOT


Jacquelyn L. Lynch

ACKNOWLEDGMENT

STATE OF TEXAS

§
§
§

COUNTY OF HARRIS

Sworn to and subscribed before me on this 7th day of April, 2015, by Jacquelyn L. Lynch, as Landman for EP Energy E&P Company, L.P., a Delaware limited partnership.


NOTARY PUBLIC

My Commission Expires:



EP Energy E&P Company, L.P.

Related Surface Information

1. Current Surface Use:

- Livestock Grazing and Oil and Gas Production.

2. Proposed Surface Disturbance:

- The road will be crown and ditch. Water wings will be constructed on the access road as needed.
- The topsoil will be windrowed and re-spread in the borrow area.
- New road to be constructed will be approximately .44 miles in length and 66 feet wide.
- All equipment and vehicles will be confined to the access road, pad and area specified in the APD.

3. Location Of Existing Wells:

- Existing oil, gas wells within one (1) mile radius of proposed well are provided in EXHIBIT C.

4. Location And Type Of Drilling Water Supply:

- Drilling water: Duchesne City Water

5. Existing/Proposed Facilities For Productive Well:

- There are no existing facilities that will be utilized for this well.
- A pipeline corridor .44 miles will parallel the proposed access road. The corridor will contain one 4 inch gas line and one 2 inch gas line and one 2 inch Salt Water disposal line. Rehabilitation of unneeded, previously disturbed areas will consist of backfilling and contouring the reserve pit area; backsloping and contouring all cut and fill slopes. These areas will be reseeded. Refer to plans for reclamation of surface for details.
- Upgrade and maintain access roads and drainage control structures (e.g., culverts, drainage dips, ditching, etc.) as necessary to prevent soil erosion and accommodate safe, year-round traffic.

6. Construction Materials:

- Native soil from road and location will be used for construction materials along with gravel and/or scoria road base material. In the event that conditions should necessitate graveling of all or part of the access road and location, surfacing materials will be purchased from commercial suppliers in the marketing area.

7. Methods For Handling Waste Disposal:

- The reserve pit will be designed to prevent the collection of surface runoff and will be constructed with a minimum of ½ the total depth below the original ground surface on the lowest point with the pit. The pit will be lined with a 20-mil polyethylene to prevent leakage of fluids. The liner will be rolled into place and secured at the ends, i.e. buried on top of the pit berms. Prior to use, the reserve pit will be fenced on three sides; the fourth side will be fenced at the time the rig is removed. Drilling fluids, cuttings and produced water will be contained in the reserve pit (trash will be placed in the trash cage). Fluids in the reserve pit will be allowed to evaporate prior to pit burial.
- Garbage and other trash will be contained in the portable trash cage and hauled off the location to an authorized disposal site. Any trash on the pad will be cleaned up prior to the rig moving off location and hauled to an authorized disposal site.
- Sewage will be handled in Portable Toilets.
- Produced water will be placed in the reserve pit for a period not to exceed ninety days after initial production. Any hydrocarbons produced during completion work will be contained in test tanks and removed from the location at a later date.
- Water from the reserve pit may be used for drilling of additional wells. The water will be trucked along access roads as approved in pertinent APD's

8. Ancillary Facilities:

- There will be no ancillary facilities associated with this project.

9. **Surface Reclamation Plans:**

Backfilling of the pits will be done when dry. In the event of a dry hole, the location will be re-contoured, the topsoil will be distributed evenly over the entire location, and the seedbed prepared.

- Seed will be planted after September 15th, and prior to ground frost, or seed will be planted after the frost has left and before May 15th. Slopes to steep for machinery will be hand broadcast and raked with twice the specified amount of seed.
 1. The construction program and design are on the attached cut, fill and cross sectional diagrams.
 2. Prior to construction, all topsoil will be removed from the entire site and stockpiled. Topsoil for this site is the first 6 inches of soil materials.
 3. After the location has been reshaped and after redistributing the topsoil, the operator will rip and scarify the drilling platform and access road on the contour, to a depth of at least 12 inches.
- Rehabilitation will begin upon the completion of the drilling. Complete rehabilitation will depend on weather conditions and the amount of time required to dry the reserve pit.
 1. All rehabilitation work including seeding will be completed as soon as weather and the reserve pit conditions are appropriate.
 2. Landowner will be contacted for rehabilitation requirements.

10. **Surface Ownership:**

Caroline Beth Woodward
1087 North 200 East
Orem, Utah 84057
801-225-6468

Other Information:

- The surface soil consists of clay, and silt.
- Flora – vegetation consists of the following: Sagebrush, Juniper and prairie grasses.
- Fauna – antelope, deer, coyotes, raptors, small mammals, and domestic grazing animals.
- Current surface uses – Livestock grazing and mineral exploration and production.

• **Operator and Contact Persons:**

Construction and Reclamation:

EP Energy E&P Company, L.P.
Wayne Garner
PO Box 410
Altamont, Utah 84001
435-454-3394 – Office
435-823-1490 – Cell

Regarding This APD

EP Energy E&P Company, L.P.
Maria S. Gomez
1001 Louisiana, Rm 2730D
Houston, Texas 77002
713-997-5038 – Office

Drilling

EP Energy E&P Company, L.P.
Brad MacAfee – Drilling Engineer
1001 Louisiana, Rm 2660D
Houston, Texas 77002
713-997-6383 – office
281-813-0902 – Cell



April 8, 2015

Mr. Brad Hill
Utah Division of Oil, Gas & Mining
1594 West North Temple, Suite 1210
P.O. Box 145801
Salt Lake City, Utah 84116-5801

RE: **Exception Location: Woodward 4-14C4 Well**
Surface Hole Location: 275' FNL, 2315' FWL (NENW) Section 14-3S-4W, U.S.B.&M.
Bottom Hole Location: 700' FNL, 2300' FWL (NENW) Section 14-3S-4W, U.S.B.&M.
Duchesne County, Utah

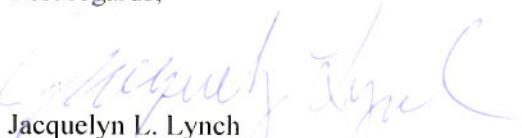
Dear Mr. Hill,

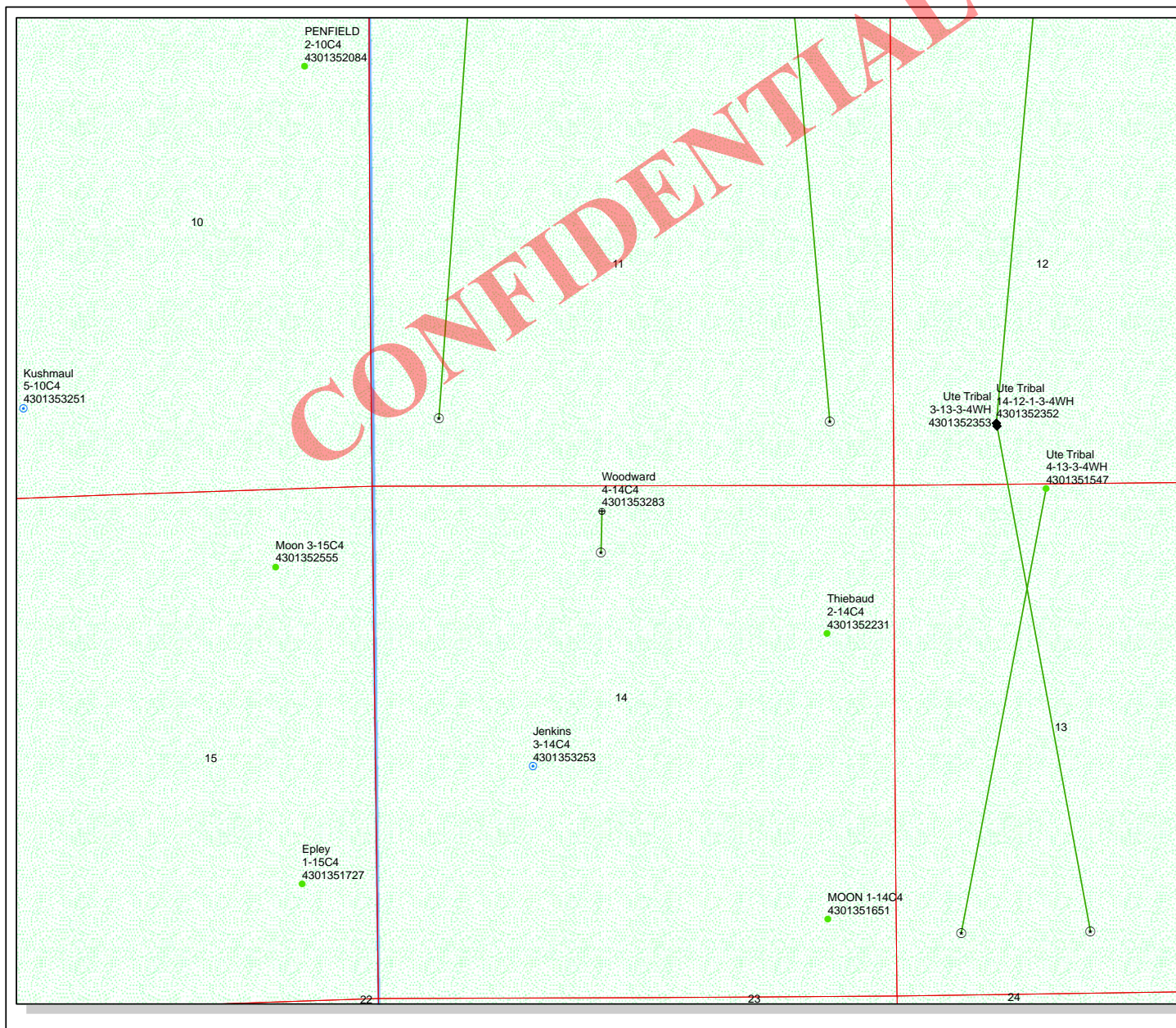
As a supplement to EP Energy E&P Company, L.P.'s ("EPE") Application for Permit to Drill the above referenced well, we hereby submit this letter in accordance with Oil & Gas Conservation Rule R649-2, 649-3, 649-10, and 649-3-11, which pertains to the Location and Siting of Directional Wells.

This well is being drilled in Section 14, Township 3 South, Range 4 West, Duchesne County, Utah, which is subject to that Cause No. 139-124, dated November 6, 2014 ("Spacing Order") that establishes 640 acre sectional drilling units for the Green River-Wasatch formations. The location and siting requirements set forth in the Spacing Order require that permitted wells shall be no closer than 990 feet from an existing unit well drilled to, completed in, and producing from the Spaced Intervals and no closer than 660 feet from the drilling unit boundary.

We plan to drill the above referenced well as directional well due to topography limitations. EPE certifies that unless first obtaining an exception to the location and siting requirement of the Spacing Order it will not perforate any part of the wellbore of the Well that is closer than 660' from the section lines.

Best regards,


Jacquelyn L. Lynch
Central Division – Altamont Business Area
EP Energy E&P Company, L.P.



API Number: 4301353283

Well Name: Woodward 4-14C4

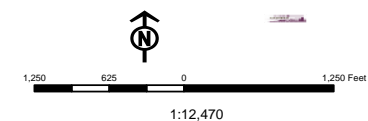
Township: T03.0S Range: R04.0W Section: 14 Meridian: U

Operator: EP ENERGY E&P COMPANY, L.P.

Map Prepared: 4/9/2015
Map Produced by Diana Mason

Wells Query		Units	
Status		STATUS	
APD - Approved Permit		ACTIVE	
DRL - Spudded (Drilling Commenced)		EXPLORATORY	
GIW - Gas Injection		GAS STORAGE	
GS - Gas Storage		NF PP OIL	
LOC - New Location		NF SECONDARY	
OPS - Operation Suspended		PI OIL	
PA - Plugged Abandoned		PP GAS	
PGW - Producing Gas Well		PP GEOTHERML	
POW - Producing Oil Well		PP OIL	
SGW - Shut-in Gas Well		SECONDARY	
SOW - Shut-in Oil Well		TERMINATED	
TA - Temp. Abandoned			
TW - Test Well			
WOW - Water Disposal			
WW - Water Injection Well			
WSW - Water Supply Well			

Fields	STATUS
	Unknown
	ABANDONED
	ACTIVE
	COMBINED
	INACTIVE
	STORAGE
	TERMINATED



Well Name	EP ENERGY E&P COMPANY, L.P. Woodward 4-14C4 43013532830000			
String	Surf	L1	L1	
Casing Size(in)	9.625	7.000	5.000	
Setting Depth (TVD)	2200	9300	12500	
Previous Shoe Setting Depth (TVD)	0	2200	9300	
Max Mud Weight (ppg)	8.3	10.4	13.5	
BOPE Proposed (psi)	1000	10000	10000	
Casing Internal Yield (psi)	5750	11220	13940	
Operators Max Anticipated Pressure (psi)	8775		13.5	

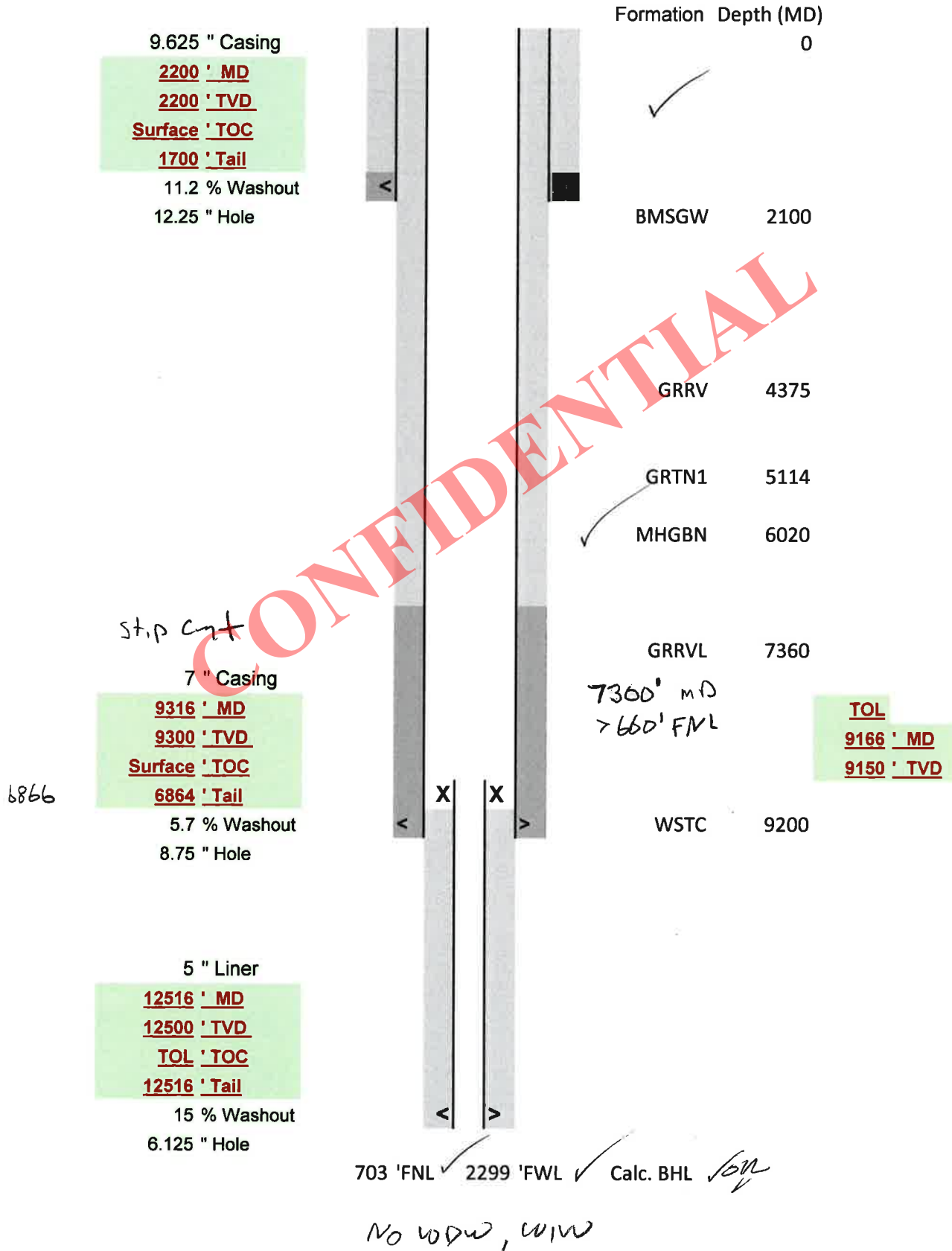
Calculations	Surf String	9.625	"
Max BHP (psi)	.052*Setting Depth*MW=	950	
			BOPE Adequate For Drilling And Setting Casing at Depth?
MASP (Gas) (psi)	Max BHP-(0.12*Setting Depth)=	686	YES <input type="checkbox"/> Diverter w/ Rotating head
MASP (Gas/Mud) (psi)	Max BHP-(0.22*Setting Depth)=	466	YES <input type="checkbox"/> OK
			*Can Full Expected Pressure Be Held At Previous Shoe?
Pressure At Previous Shoe	Max BHP-.22*(Setting Depth - Previous Shoe Depth)=	466	NO <input type="checkbox"/> OK <input type="checkbox"/>
Required Casing/BOPE Test Pressure=		2200	psi
*Max Pressure Allowed @ Previous Casing Shoe=		0	psi *Assumes 1psi/ft frac gradient

Calculations	L1 String	7.000	"
Max BHP (psi)	.052*Setting Depth*MW=	5029	
			BOPE Adequate For Drilling And Setting Casing at Depth?
MASP (Gas) (psi)	Max BHP-(0.12*Setting Depth)=	3913	YES <input type="checkbox"/> 10M stack, 5M annular
MASP (Gas/Mud) (psi)	Max BHP-(0.22*Setting Depth)=	2983	YES <input type="checkbox"/> OK
			*Can Full Expected Pressure Be Held At Previous Shoe?
Pressure At Previous Shoe	Max BHP-.22*(Setting Depth - Previous Shoe Depth)=	3467	NO <input type="checkbox"/> OK <input type="checkbox"/>
Required Casing/BOPE Test Pressure=		7854	psi
*Max Pressure Allowed @ Previous Casing Shoe=		2200	psi *Assumes 1psi/ft frac gradient

Calculations	L1 String	5.000	"
Max BHP (psi)	.052*Setting Depth*MW=	8775	
			BOPE Adequate For Drilling And Setting Casing at Depth?
MASP (Gas) (psi)	Max BHP-(0.12*Setting Depth)=	7275	YES <input type="checkbox"/> 10M stack, 5M annular
MASP (Gas/Mud) (psi)	Max BHP-(0.22*Setting Depth)=	6025	YES <input type="checkbox"/> OK
			*Can Full Expected Pressure Be Held At Previous Shoe?
Pressure At Previous Shoe	Max BHP-.22*(Setting Depth - Previous Shoe Depth)=	8071	YES <input type="checkbox"/> OK <input type="checkbox"/>
Required Casing/BOPE Test Pressure=		9758	psi
*Max Pressure Allowed @ Previous Casing Shoe=		9300	psi *Assumes 1psi/ft frac gradient

Calculations	String		"
Max BHP (psi)	.052*Setting Depth*MW=		
			BOPE Adequate For Drilling And Setting Casing at Depth?
MASP (Gas) (psi)	Max BHP-(0.12*Setting Depth)=		NO <input type="checkbox"/>
MASP (Gas/Mud) (psi)	Max BHP-(0.22*Setting Depth)=		NO <input type="checkbox"/>
			*Can Full Expected Pressure Be Held At Previous Shoe?
Pressure At Previous Shoe	Max BHP-.22*(Setting Depth - Previous Shoe Depth)=		NO <input type="checkbox"/>
Required Casing/BOPE Test Pressure=			psi
*Max Pressure Allowed @ Previous Casing Shoe=			psi *Assumes 1psi/ft frac gradient

EP ENERGY E&P COMPANY, L.P.
Woodward 4-14C4
43013532830000



MASP	Collapse Strength (psi)	Collapse Load (psi)	Collapse DF	Burst Strength (psi)	Burst Load (psi)	Burst DF	Tension Strength (kips)	Tension DF	Neutral Point (ft)	Tension Air (kips)	Tension Buoyed (kips)
685	3090	949	3.26	5750	2200	2.61	737	8.38	1921	88.0	77.1
MW (ppg)	Internal Grad. (psi)	Backup Mud (ppg)	Internal Mud (ppg)	Max Shoe Pressure (psi)*	CSG Wt (lbs/ft)	CSG Grade	CSG Collar	Cement Lead (sx)	Lead Yield	Cement Tail (sx)	Tail Yield
8.3	0.12			3462	40.0	N-80	LTC	473	2.36	195	1.30
MASP	Collapse Strength (psi)	Collapse Load (psi)	Collapse DF	Burst Strength (psi)	Burst Load (psi)	Burst DF	Tension Strength (kips)	Tension DF	Neutral Point (ft)	Tension Air (kips)	Tension Buoyed (kips)
2978	9200	5024	1.83	11220	8062	1.39	797	3.50	7821	270.2	227.7
MW (ppg)	Internal Grad. (psi)	Backup Mud (ppg)	Internal Mud (ppg)	Max Shoe Pressure (psi)*	CSG Wt (lbs/ft)	CSG Grade	CSG Collar	Cement Lead (sx)	Lead Yield	Cement Tail (sx)	Tail Yield
10.4	0.22			8062	29.0	HCP-110	LTC	678	1.91	298	1.64
MASP	Collapse Strength (psi)	Collapse Load (psi)	Collapse DF	Burst Strength (psi)	Burst Load (psi)	Burst DF	Tension Strength (kips)	Tension DF	Neutral Point (ft)	Tension Air (kips)	Tension Buoyed (kips)
6016	13418	8766	1.53	13940	8766	1.59	495	10.33	11824	60.3	47.9
MW (ppg)	Internal Grad. (psi)	Backup Mud (ppg)	Internal Mud (ppg)	Max Shoe Pressure (psi)*	CSG Wt (lbs/ft)	CSG Grade	CSG Collar	Cement Lead (sx)	Lead Yield	Cement Tail (sx)	Tail Yield
13.5	0.22			9166	18.0	HCP-110	LTC	200	1.52		

9.625 " Casing

7" Casing

5 " Liner

ON-SITE PREDRILL EVALUATION

Utah Division of Oil, Gas and Mining

Operator EP ENERGY E&P COMPANY, L.P.
Well Name Woodward 4-14C4
API Number 43013532830000 **APD No** 11143 **Field/Unit** NORTH MYTON BENCH
Location: 1/4,1/4NENW **Sec** 14 **Tw** 3.0S **Rng** 4.0W 275 FNL 2315 FWL
GPS Coord (UTM) **Surface Owner** Caroline Beth Woodward

Participants

Kelsey Carter, Heather Ivie, Jared Thacker (EP Energy); Dennis Ingram (Utah Division of Oil, Gas & Mining)

Regional/Local Setting & Topography

The Woodward 4-14C4HZ (now changed to the Woodward 4-14C4 04-15-2015 BH) is located in northeastern Utah approximately 3.54 miles north of Duchesne along Highway 87, then east for another 5.02 miles before turning north for another 0.78 miles where the access road will turn northwest for 0.49 miles. Regionally, this well plots up along the northern reaches of Blue Bench which is mostly flat, bench-like habitat that slopes gently to the south into the Duchesne River Drainage. The topography rises to the north into rocky shelf-like habitat that is commonly found on Black tail Mountain or the southern slopes of the Book Cliffs, then into more bench property that has scattered pinion juniper trees. Approximately five miles to the west, the topography drops off Blue Bench into the Duchesne River corridor that drains south from the Uinta Mountains. The topography at the proposed location slopes to the south and shows a ten foot drop in elevation across the width of the pad area.

Surface Use Plan

Current Surface Use
 Recreational
 Wildlife Habitat

New Road Miles	Well Pad	Src Const Material	Surface Formation
0.49	Width 407 Length 465	Onsite	UNTA

Ancillary Facilities N

Waste Management Plan Adequate?

Environmental Parameters

Affected Floodplains and/or Wetlands N

Flora / Fauna

Sage brush, prickly pear cactus, limited grasses

Mule deer winter range potential, coyote, rabbit, prairie dog, smaller mammals, smaller song birds native to region, also owl, hawk and eagle potential

Soil Type and Characteristics

Reddish brown, fine-grained blow sand with some clays present

Erosion Issues N**Sedimentation Issues** N**Site Stability Issues** N**Drainage Diversion Required?** N**Berm Required?** N**Erosion Sedimentation Control Required?** N**Paleo Survey Run?** N **Paleo Potential Observed?** N **Cultural Survey Run?** N **Cultural Resources?** N**Reserve Pit****Site-Specific Factors****Site Ranking**

Distance to Groundwater (feet)	>200	0
Distance to Surface Water (feet)	>1000	0
Dist. Nearest Municipal Well (ft)	>5280	0
Distance to Other Wells (feet)	>1320	0
Native Soil Type	High permeability	20
Fluid Type	Fresh Water	5
Drill Cuttings	Normal Rock	0
Annual Precipitation (inches)		0
Affected Populations		
Presence Nearby Utility Conduits	Not Present	0
Final Score	25	1 Sensitivity Level

Characteristics / Requirements

Reserve pit proposed on north side of location in cut, measuring 110' wide by 150' long by 12' deep, with prevailing winds from the west.

Closed Loop Mud Required? N **Liner Required?** Y **Liner Thickness** 16 **Pit Underlayment Required?****Other Observations / Comments**

Dennis Ingram
Evaluator

11/6/2013
Date / Time

Application for Permit to Drill

Statement of Basis

Utah Division of Oil, Gas and Mining

APD No	API WellNo	Status	Well Type	Surf Owner	CBM
11143	43013532830000	LOCKED	OW	P	No
Operator	EP ENERGY E&P COMPANY, L.P.		Surface Owner-APD	Caroline Beth Woodward	
Well Name	Woodward 4-14C4		Unit		
Field	NORTH MYTON BENCH		Type of Work	DRILL	
Location	NENW 14 3S 4W U 275 FNL (UTM) 559168E 4453243N		2315 FWL GPS Coord		

Geologic Statement of Basis

El Paso proposes to set 60 feet of conductor and 2,200 feet of surface casing both of which will be cemented to surface. The surface and intermediate holes will be drilled with air. The estimated depth to the base of moderately saline ground water is 2,100 feet. A search of Division of Water Rights records indicates that there are 4 water wells within a 10,000 foot radius of the center of Section 14. These wells probably produce water from the Duchesne River Formation. Depths of the wells fall in the range of 300-650 feet. The wells are listed as being used for irrigation, stock watering and domestic. The proposed drilling, casing and cement program should adequately protect the highly used Duchesne River aquifer.

Brad Hill
APD Evaluator

4/15/2015
Date / Time

Surface Statement of Basis

The surface at the proposed well site slopes gently toward the south, having a ten foot drop from the northern corners to the south. The reserve pit is proposed along the north side of the well pad, in cut with fine-grained sandy soils. Therefore, the operator shall install and maintain a 16 mil or thicker synthetic liner in the reserve pit. The location shall be bermed to prevent fluids from leaving the well site. There aren't any drainage issues found that will impact the surface construction of this location.

A presite was scheduled and performed for the Woodward 4-14C4HZ (now the Woodward 4-14C4 04/15/2015 BH) on November 6, 2013 to address issues regarding the construction and drilling of this well. Frank and Caroline Woodward were shown as the landowners and were therefore invited to the presite but did not attend. EP Energy and the Woodwards have entered into a surface damage agreement.

Dennis Ingram
Onsite Evaluator

11/6/2013
Date / Time

Conditions of Approval / Application for Permit to Drill

Category	Condition
Pits	A synthetic liner with a minimum thickness of 16 mils shall be properly installed and maintained in the reserve pit.
Pits	The reserve pit should be located on the north side of the location.
Surface	The well site shall be bermed to prevent fluids from entering or leaving the pad.

WORKSHEET APPLICATION FOR PERMIT TO DRILL

APD RECEIVED: 4/8/2015

API NO. ASSIGNED: 43013532830000

WELL NAME: Woodward 4-14C4

OPERATOR: EP ENERGY E&P COMPANY, L.P. (N3850)

PHONE NUMBER: 713 997-5038

CONTACT: Maria S. Gomez

PROPOSED LOCATION: NENW 14 030S 040W

Permit Tech Review: ☒

SURFACE: 0275 FNL 2315 FWL

Engineering Review: ☒

BOTTOM: 0700 FNL 2300 FWL

Geology Review: ☒

COUNTY: DUCHESNE

LATITUDE: 40.22753

LONGITUDE: -110.30452

UTM SURF EASTINGS: 559168.00

NORTHINGS: 4453243.00

FIELD NAME: NORTH MYTON BENCH

LEASE TYPE: 4 - Fee

LEASE NUMBER: Fee

PROPOSED PRODUCING FORMATION(S): GREEN RIVER(LWR)-WASATCH

SURFACE OWNER: 4 - Fee

COALBED METHANE: NO

RECEIVED AND/OR REVIEWED:

☒ PLAT☒ Bond: STATE/FEE - 400JU0708☐ Potash☐ Oil Shale 190-5☐ Oil Shale 190-3☐ Oil Shale 190-13☒ Water Permit: Duchesne City☐ RDCC Review:☒ Fee Surface Agreement☐ Intent to Commingle

Commingling Approved

LOCATION AND SITING:

☐ R649-2-3.

Unit:

☐ R649-3-2. General☐ R649-3-3. Exception☒ Drilling Unit

Board Cause No: Cause 139-124

Effective Date: 11/6/2014

Siting: 8 WELLS PER SECTION

☒ R649-3-11. Directional Drill

Comments: Presite Completed

Stipulations: 5 - Statement of Basis - bhill
12 - Cement Volume (3) - daynedoucet
15 - Directional - dmason

RECEIVED: April 28, 2015



GARY R. HERBERT
Governor

SPENCER J. COX
Lieutenant Governor

State of Utah

DEPARTMENT OF NATURAL RESOURCES

MICHAEL R. STYLER
Executive Director

Division of Oil, Gas and Mining

JOHN R. BAZA
Division Director

Permit To Drill

Well Name: Woodward 4-14C4

API Well Number: 43013532830000

Lease Number: Fee

Surface Owner: FEE (PRIVATE)

Approval Date: 4/28/2015

Issued to:

EP ENERGY E&P COMPANY, L.P., 1001 Louisiana, Houston, TX 77002

Authority:

Pursuant to Utah Code Ann. 40-6-1 et seq., and Utah Administrative Code R649-3-1 et seq., the Utah Division of Oil, Gas and Mining issues conditions of approval, and permit to drill the listed well. This permit is issued in accordance with the requirements of Cause 139-124. The expected producing formation or pool is the GREEN RIVER(LWR)-WASATCH Formation(s), completion into any other zones will require filing a Sundry Notice (Form 9). Completion and commingling of more than one pool will require approval in accordance with R649-3-22.

Duration:

This approval shall expire one year from the above date unless substantial and continuous operation is underway, or a request for extension is made prior to the expiration date

General:

Compliance with the requirements of Utah Admin. R. 649-1 et seq., the Oil and Gas Conservation General Rules, and the applicable terms and provisions of the approved Application for permit to drill.

Conditions of Approval:

In accordance with Utah Admin. R.649-3-11, Directional Drilling, the operator shall submit a complete angular deviation and directional survey report to the Division within 30 days following completion of the well.

Compliance with the Conditions of Approval/Application for Permit to Drill outlined in the Statement of Basis (copy attached).

Cement volume for the 7" casing shall be determined from actual hole diameter in order to place tail cement from the pipe setting depth back to 6866' MD (above lower Green River) as indicated in the submitted drilling plan.

Additional Approvals:

The operator is required to obtain approval from the Division of Oil, Gas and mining before performing any of the following actions during the drilling of this well:

- Any changes to the approved drilling plan - contact Dustin Doucet
- Significant plug back of the well - contact Dustin Doucet
- Plug and abandonment of the well - contact Dustin Doucet

Notification Requirements:

The operator is required to notify the Division of Oil, Gas and Mining of the following actions during drilling of this well:

- Within 24 hours following the spudding of the well - contact Carol Daniels
OR
submit an electronic sundry notice (pre-registration required) via the Utah Oil & Gas website
at <http://oilgas.ogm.utah.gov>
- 24 hours prior to testing blowout prevention equipment - contact Dan Jarvis
- 24 hours prior to cementing or testing casing - contact Dan Jarvis
- Within 24 hours of making any emergency changes to the approved drilling program
- contact Dustin Doucet
- 24 hours prior to commencing operations to plug and abandon the well - contact Dan Jarvis

Contact Information:

The following are Division of Oil, Gas and Mining contacts and their telephone numbers (please leave a voicemail message if the person is not available to take the call):

- Carol Daniels 801-538-5284 - office
- Dustin Doucet 801-538-5281 - office
801-733-0983 - after office hours
- Dan Jarvis 801-538-5338 - office
801-231-8956 - after office hours

Reporting Requirements:

All reports, forms and submittals as required by the Utah Oil and Gas Conservation General Rules will be promptly filed with the Division of Oil, Gas and Mining, including but not limited to:

- Entity Action Form (Form 6) - due within 5 days of spudding the well
- Monthly Status Report (Form 9) - due by 5th day of the following calendar month
- Requests to Change Plans (Form 9) - due prior to implementation
- Written Notice of Emergency Changes (Form 9) - due within 5 days
- Notice of Operations Suspension or Resumption (Form 9) - due prior to implementation
- Report of Water Encountered (Form 7) - due within 30 days after completion
- Well Completion Report (Form 8) - due within 30 days after completion or plugging

Approved By:

Approved By:

A handwritten signature in black ink, appearing to read "J. Rogers", written over a faint horizontal line.

For John Rogers
Associate Director, Oil & Gas

CONFIDENTIAL

Carol Daniels <caroldaniels@utah.gov>

NEW SEC 14 T025 R04 W FEE LEASE

24hr Notice Run & Cement Casing Woodward 4-14C4 API # 43013532830000

1 message

LANDRIG009 (Precision 406) <LANDRIG009@epenergy.com>

Mon, May 4, 2015 at 11:07 PM

To: "alexishuefner@utah.gov" <alexishuefner@utah.gov>, "MacAfee, Bradley D" <Brad.MacAfee@epenergy.com>, "caroldaniels@utah.gov" <caroldaniels@utah.gov>, "dennisingram@utah.gov" <dennisingram@utah.gov>, "Dodd, Robert W" <Robert.Dodd@epenergy.com>, "Mangum, Danny R (Contractor)" <danny.mangum@epenergy.com>, "Gomez, Maria S" <Maria.Gomez@epenergy.com>, "Derden, Roy Lynn (Contractor)" <Roy.Derden@epenergy.com>

RE: EP ENERGY

WOODWARD 4-14C4

API # 43013532830000

ALTAMONT FIELD

DUCHESNE COUNTY

Leon Ross Drilling commenced drilling 12¼" section @ 13:00 hrs 5/4/2015. We plan on running and cementing 9-5/8" Surface Casing to +/- 2,200' within 24hrs.

Regards,

Tony Wilkerson / Bill Owen

EP Energy LLC

PD Rig 406

Rig: 713-997-1220

Cell: 435-823-1764

THIS E-MAIL AND ANY MATERIALS TRANSMITTED WITH IT MAY CONTAIN CONFIDENTIAL OR PROPRIETARY MATERIAL FOR THE SOLE USE OF THE INTENDED RECIPIENT. ANY REVIEW, USE, DISTRIBUTION OR DISCLOSURE BY OTHERS IS STRICTLY PROHIBITED. IF YOU ARE NOT THE INTENDED RECIPIENT, OR AUTHORIZED TO RECEIVE THE INFORMATION FROM THE RECIPIENT, PLEASE NOTIFY THE SENDER BY REPLY E-MAIL AND DELETE ALL COPIES OF THIS MESSAGE.

CONFIDENTIAL

Carol Daniels <caroldaniels@utah.gov>

NENW SEC 14 T03S R04W FEE LEASE

24hr Spud Notice Woodward 4-14C4 API # 43013532830000

1 message

LANDRIG009 (Precision 406) <LANDRIG009@epenergy.com>

Thu, Apr 30, 2015 at 4:23 PM

To: "alexishuefner@utah.gov" <alexishuefner@utah.gov>, "MacAfee, Bradley D" <Brad.MacAfee@epenergy.com>, "caroldaniels@utah.gov" <caroldaniels@utah.gov>, "dennisingram@utah.gov" <dennisingram@utah.gov>, "Dodd, Robert W" <Robert.Dodd@epenergy.com>, "Mangum, Danny R (Contractor)" <danny.mangum@epenergy.com>, "Gomez, Maria S" <Maria.Gomez@epenergy.com>, "Derden, Roy Lynn (Contractor)" <Roy.Derden@epenergy.com>

RE: EP ENERGY

WOODWARD 4-14C4

API # 43013532830000

ALTAMONT FIELD

DUCHESNE COUNTY

Leon Ross Drilling spudded the well @ 16:00hrs on 4/30/2015. We plan on running and cementing 20" Conductor Casing to +/- 60' within 24hrs.

Regards,

Tony Wilkerson / Bill Owen

EP Energy LLC

PD Rig 406

Rig: 713-997-1220

Cell: 435-823-1764

THIS E-MAIL AND ANY MATERIALS TRANSMITTED WITH IT MAY CONTAIN CONFIDENTIAL OR PROPRIETARY MATERIAL FOR THE SOLE USE OF THE INTENDED RECIPIENT. ANY REVIEW, USE, DISTRIBUTION OR DISCLOSURE BY OTHERS IS STRICTLY PROHIBITED. IF YOU ARE NOT THE INTENDED RECIPIENT, OR AUTHORIZED TO RECEIVE THE INFORMATION FROM THE RECIPIENT, PLEASE NOTIFY THE SENDER BY REPLY E-MAIL AND DELETE ALL COPIES OF THIS MESSAGE.



CONFIDENTIAL

Carol Daniels <caroldaniels@utah.gov>

NEW S-14 TO 35 ROW FREE LEASE

24hr Notice Run & Cement Casing

1 message

LANDRIG009 (Precision 406) <LANDRIG009@epenergy.com>

Mon, Jun 1, 2015 at 1:21 PM

To: "alexishuefner@utah.gov" <alexishuefner@utah.gov>, "MacAfee, Bradley D" <Brad.MacAfee@epenergy.com>, "caroldaniels@utah.gov" <caroldaniels@utah.gov>, "dennisingram@utah.gov" <dennisingram@utah.gov>, "Dodd, Robert W" <Robert.Dodd@epenergy.com>, "Mangum, Danny R (Contractor)" <danny.mangum@epenergy.com>, "Gomez, Maria S" <Maria.Gomez@epenergy.com>, "Derden, Roy Lynn (Contractor)" <Roy.Derden@epenergy.com>

RE: EP ENERGY

WOODWARD 4-14C4

API # 43013532830000

ALTAMONT FIELD

DUCHESNE COUNTY

We plan on running & cementing 7" 29# HCP-110 LT&C Intermediate Casing to +/- 9,316' within 24hrs.

Regards,

Tony Wilkerson / Bill Owen

EP Energy LLC

PD Rig 406

Rig: 713-997-1220

Cell: 435-823-1764

THIS E-MAIL AND ANY MATERIALS TRANSMITTED WITH IT MAY CONTAIN CONFIDENTIAL OR PROPRIETARY MATERIAL FOR THE SOLE USE OF THE INTENDED RECIPIENT. ANY REVIEW, USE, DISTRIBUTION OR DISCLOSURE BY OTHERS IS STRICTLY PROHIBITED. IF YOU ARE NOT THE INTENDED RECIPIENT, OR AUTHORIZED TO RECEIVE THE INFORMATION FROM THE RECIPIENT, PLEASE NOTIFY THE SENDER BY REPLY E-MAIL AND DELETE ALL COPIES OF THIS MESSAGE.

STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING		FORM 9
SUNDRY NOTICES AND REPORTS ON WELLS Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.		5. LEASE DESIGNATION AND SERIAL NUMBER: Fee
		6. IF INDIAN, ALLOTTEE OR TRIBE NAME:
		7. UNIT or CA AGREEMENT NAME:
1. TYPE OF WELL Oil Well	8. WELL NAME and NUMBER: Woodward 4-14C4	
2. NAME OF OPERATOR: EP ENERGY E&P COMPANY, L.P.		9. API NUMBER: 43013532830000
3. ADDRESS OF OPERATOR: 1001 Louisiana, Houston, TX, 77002	PHONE NUMBER: 713 997-5038 Ext	9. FIELD and POOL or WILDCAT: NORTH MYTON BENCH
4. LOCATION OF WELL FOOTAGES AT SURFACE: 0275 FNL 2315 FWL QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: NENW Section: 14 Township: 03.0S Range: 04.0W Meridian: U		COUNTY: DUCHESNE
		STATE: UTAH

11.

CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION		
<input checked="" type="checkbox"/> NOTICE OF INTENT Approximate date work will start: 6/26/2015	<input type="checkbox"/> ACIDIZE <input type="checkbox"/> CHANGE TO PREVIOUS PLANS <input type="checkbox"/> CHANGE WELL STATUS <input type="checkbox"/> DEEPEN <input type="checkbox"/> OPERATOR CHANGE <input type="checkbox"/> PRODUCTION START OR RESUME <input type="checkbox"/> REPERFORATE CURRENT FORMATION <input type="checkbox"/> TUBING REPAIR <input type="checkbox"/> WATER SHUTOFF <input type="checkbox"/> WILDCAT WELL DETERMINATION	<input type="checkbox"/> ALTER CASING <input type="checkbox"/> CHANGE TUBING <input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS <input type="checkbox"/> FRACTURE TREAT <input type="checkbox"/> PLUG AND ABANDON <input type="checkbox"/> RECLAMATION OF WELL SITE <input type="checkbox"/> SIDETRACK TO REPAIR WELL <input type="checkbox"/> VENT OR FLARE <input type="checkbox"/> SI TA STATUS EXTENSION <input checked="" type="checkbox"/> OTHER	<input type="checkbox"/> CASING REPAIR <input type="checkbox"/> CHANGE WELL NAME <input type="checkbox"/> CONVERT WELL TYPE <input type="checkbox"/> NEW CONSTRUCTION <input type="checkbox"/> PLUG BACK <input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION <input type="checkbox"/> TEMPORARY ABANDON <input type="checkbox"/> WATER DISPOSAL <input type="checkbox"/> APD EXTENSION OTHER: <input type="text" value="Initial Completion"/>
<input type="checkbox"/> SUBSEQUENT REPORT Date of Work Completion:			
<input type="checkbox"/> SPUD REPORT Date of Spud:			
<input type="checkbox"/> DRILLING REPORT Report Date:			

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.

EP plans to complete in the Wasatch. Please see attached for details.

Approved by the
Utah Division of
Oil, Gas and Mining

Date: _____

By: Derek Duff

NAME (PLEASE PRINT) Maria S. Gomez	PHONE NUMBER 713 997-5038	TITLE Principal Regulatory Analyst
SIGNATURE N/A		DATE 6/24/2015

Stimulation Summary

	Top Perf	Btm. Perf	Gross Interval	Plug Depth	Net Perf Length	Total Shots	Perf Intervals	Type of Prop	Lbs of Prop	Lbs/ft	Lbs of 100 Mesh	Gals of HCL (15%)	BBLs of Clean H2O	BBLs of Slurry
Stage #1	11,494	11,778	284	NA	23	69	17	Power Prop 30/50	150,000	528	3,000	5,000	3,703	4,109
Stage #2	11,144	11,443	299	11,458	23	69	17	Power Prop 30/50	150,000	502	3,000	5,000	3,697	4,103
Stage #3	10,869	11,100	231	11,115	21	63	17	Power Prop 30/50	150,000	649	3,000	5,000	3,692	4,098
Stage #4	10,562	10,824	262	10,839	23	69	17	Power Prop 30/50	150,000	573	3,000	5,000	3,687	4,093
Stage #5	10,255	10,528	273	10,543	23	69	17	Power Prop 30/50	150,000	549	3,000	5,000	3,681	4,087
Stage #6	9,983	10,214	231	10,229	23	69	17	Power Prop 30/50	150,000	649	3,000	5,000	3,676	4,083
Stage #7	9,697	9,951	254	9,966	23	69	17	Power Prop 30/50	150,000	591	3,000	5,000	3,671	4,077
Stage #8	9,410	9,660	250	9,675	23	69	17	Power Prop 30/50	150,000	600	3,000	5,000	3,666	4,072
Average per Stage			261		23	68	17		150,000	580	3,000	5,000	3,684	4,090
Totals per Well			2,084		182	546	136		1,200,000		24,000	40,000	29,473	32,723

Top Perf: 9,410
Bottom Perf: 11,778

Number of Stages 8

Tops	Depth
Liner Top:	9,163
	-
	-
Stage #8 Plug	9,675
Stage #7 Plug	9,966
Stage #6 Plug	10,229
Stage #5 Plug	10,543
Stage #4 Plug	10,839
Stage #3 Plug	11,115
Stage #2 Plug	11,458
Stage #1 Plug	NA
Landing Collar	11,926
Float Collar	11,970
Float Shoe	12,013

* Look for Hidden Cells if you need more/less stages

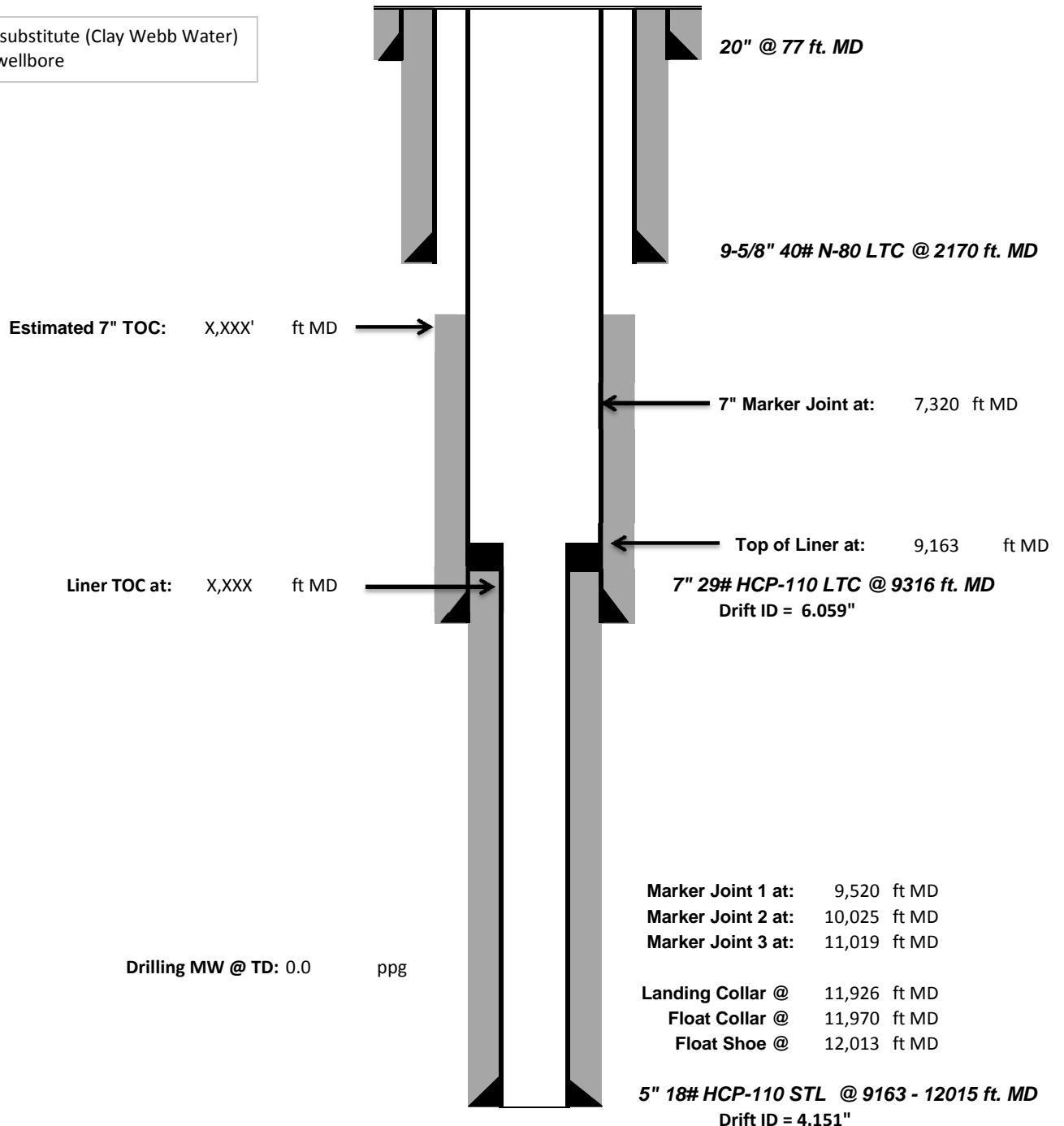


Pre-Completion Wellbore Schematic

Well Name: **Woodward 4-14C4**
 Company Name: **EP Energy**
 Field, County, State: **Altamont, Duchesne, UT**
 Surface Location: **Lat: 40 13' 38.984" N Long: 110 18' 16.518" W**
 Producing Zone(s): **Wasatch**

Last Updated: **6/22/2015**
 By: **Ryan Krug**
 TD: **12,013**
 API: **4301353283**
 AFE: **161037**

8.43 ppg KCL substitute (Clay Webb Water)
 water in the wellbore



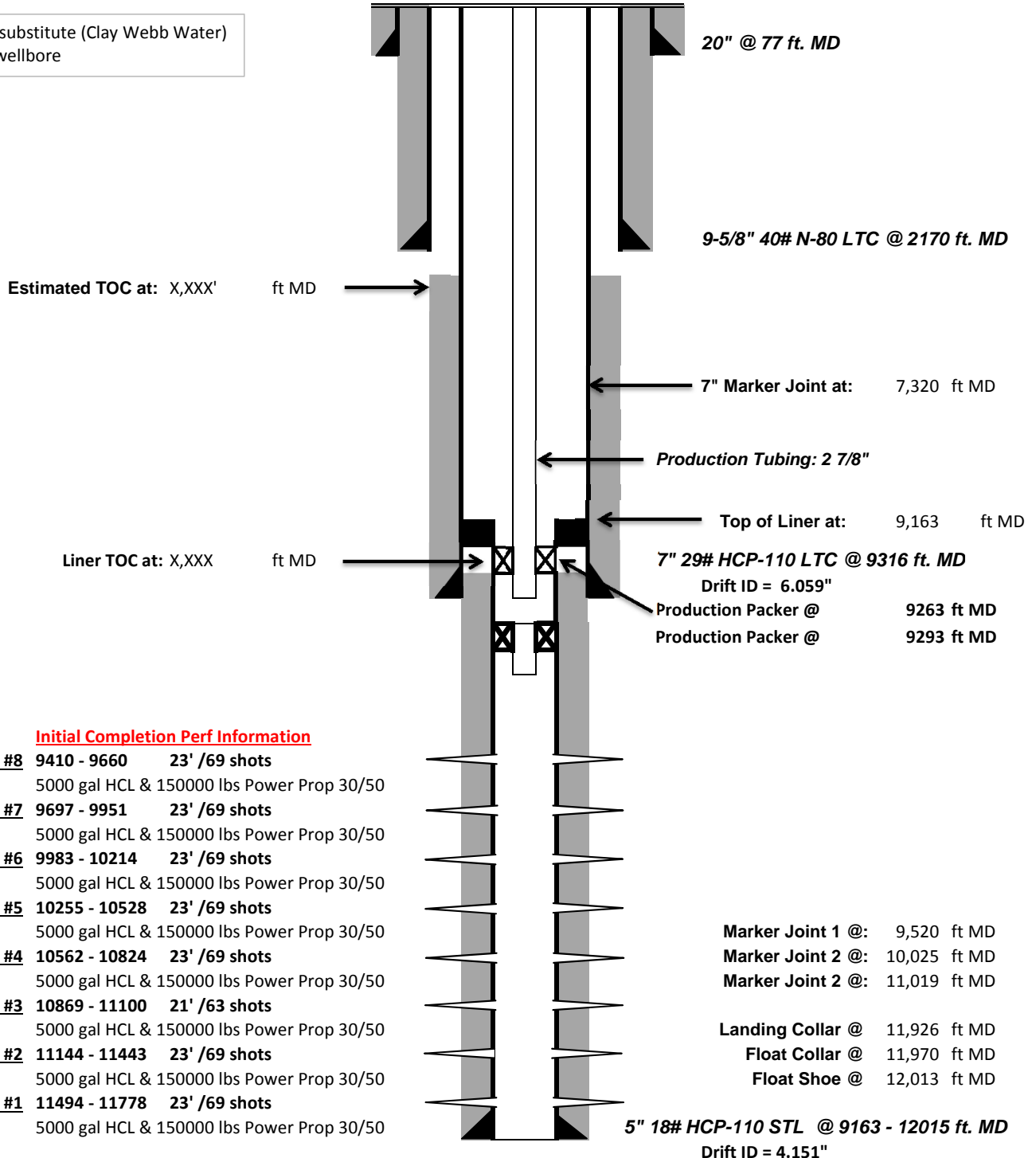


Post-Completion Wellbore Schematic

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 By: **Ryan Krug**
 TD: **12,013**
 API: **4301353283**
 AFE: **161037**

8.43 ppg KCL substitute (Clay Webb Water)
 water in the wellbore



STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING		FORM 9
SUNDRY NOTICES AND REPORTS ON WELLS Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.		5. LEASE DESIGNATION AND SERIAL NUMBER: Fee
		6. IF INDIAN, ALLOTTEE OR TRIBE NAME:
		7. UNIT or CA AGREEMENT NAME:
1. TYPE OF WELL Oil Well	8. WELL NAME and NUMBER: Woodward 4-14C4	
2. NAME OF OPERATOR: EP ENERGY E&P COMPANY, L.P.		9. API NUMBER: 43013532830000
3. ADDRESS OF OPERATOR: 1001 Louisiana, Houston, TX, 77002	PHONE NUMBER: 713 997-5038 Ext	9. FIELD and POOL or WILDCAT: NORTH MYTON BENCH
4. LOCATION OF WELL FOOTAGES AT SURFACE: 0275 FNL 2315 FWL QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: NENW Section: 14 Township: 03.0S Range: 04.0W Meridian: U		COUNTY: DUCHESNE
		STATE: UTAH

11.

CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION		
<input checked="" type="checkbox"/> NOTICE OF INTENT Approximate date work will start: 7/8/2015	<input type="checkbox"/> ACIDIZE <input type="checkbox"/> CHANGE TO PREVIOUS PLANS <input type="checkbox"/> CHANGE WELL STATUS <input type="checkbox"/> DEEPEN <input type="checkbox"/> OPERATOR CHANGE <input type="checkbox"/> PRODUCTION START OR RESUME <input type="checkbox"/> REPERFORATE CURRENT FORMATION <input type="checkbox"/> TUBING REPAIR <input type="checkbox"/> WATER SHUTOFF <input type="checkbox"/> WILDCAT WELL DETERMINATION	<input type="checkbox"/> ALTER CASING <input type="checkbox"/> CHANGE TUBING <input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS <input type="checkbox"/> FRACTURE TREAT <input type="checkbox"/> PLUG AND ABANDON <input type="checkbox"/> RECLAMATION OF WELL SITE <input type="checkbox"/> SIDETRACK TO REPAIR WELL <input type="checkbox"/> VENT OR FLARE <input type="checkbox"/> SI TA STATUS EXTENSION <input checked="" type="checkbox"/> OTHER	<input type="checkbox"/> CASING REPAIR <input type="checkbox"/> CHANGE WELL NAME <input type="checkbox"/> CONVERT WELL TYPE <input type="checkbox"/> NEW CONSTRUCTION <input type="checkbox"/> PLUG BACK <input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION <input type="checkbox"/> TEMPORARY ABANDON <input type="checkbox"/> WATER DISPOSAL <input type="checkbox"/> APD EXTENSION OTHER: <input type="text" value="Cement Squeeze"/>
<input type="checkbox"/> SUBSEQUENT REPORT Date of Work Completion:			
<input type="checkbox"/> SPUD REPORT Date of Spud:			
<input type="checkbox"/> DRILLING REPORT Report Date:			

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.

Please see attached for details.

Approved by the
July 08, 2015
Oil, Gas and Mining

Date: _____

By: Derek Duff

NAME (PLEASE PRINT) Maria S. Gomez	PHONE NUMBER 713 997-5038	TITLE Principal Regulatory Analyst
SIGNATURE N/A		DATE 7/8/2015



Cement Squeeze

Woodward 4-14C4

API # : 4301353283

Section: Sec 14 T3S R4W

Lat: 40 13' 38.984" N , Long: 110 18' 16.518" W

Altamont Field

Duchesne County, UT

Version #2 : 7/8/2015

V2 to change testing pressure on 7" in Step 12

Objective :

Squeeze 7" x 9-5/8" (open hole below 2,170') annulus to stop surface casing pressure issue.

This procedure will be performed between steps 2 & 3 of the tube up procedure (Version 2 dated 7/1/2015).

**Cement Squeeze
Procedure Woodward
4-14C4**

Tubular Data

String	Description	Burst psi 100%	Collapse psi 100%	Body Yield (Mlbs)	Jt Yield (Mlbs)	ID (in.)	Drift (in.)	TOC (ft)
Conductor Casing	20" @ 77							Surface
Surface Casing	9-5/8" 40# N-80 LTC @ 2170	5750	3090	916	737	8.835	8.679	Surface
Intermediate Casing	7" 29# HCP-110 LTC @ 9316	11220	9200	929	797	6.184	6.059	3,350
Production Liner	5" 18# HCP-110 STL @ 9160 - 12015	13940	15450	580	341	4.267	4.151	9,200
Tubing (proposed)	2-7/8" 6.5 ppf N-80	10570	11160		145	2.441	2.347	
Tubing (proposed)	2-3/8" 4.6 ppg N-80	11200	11780		104	1.995	1.901	

Current Wellbore Condition

8 stage Wasatch completion has been frac stimulated and CBPs were drilled out using coiled tubing. The flowed back for 4 days.

This procedure will be performed after setting the packer on the tube up procedure (Version 2 dated 7/1/2015) between steps 2 & 3. When this procedure is referenced, the packer will be set @ 9,260'. A negative test (no flow for 15 mins) will have been performed on the packer. 7" 10K BOPs will be NU & tested on top of a 7" 10K master valve.

7" Annulus Squeeze

1. RU workover rig. PU and RIH with 7" 29# retrievable bridge plug on 2-7/8" 6.5 N-80 workstring.
2. Set 7" 29# retrievable bridge plug @ 4,000'. Spot 30' sand (1.1 BBL, 6.26 ft³) on top of retrievable plug.
3. POOH w/ 2-7/8" workstring.
4. RU WLU w/ 5K lubricator. Test lubricator to 4,000 psi. RIH & shoot squeeze holes in 7" casing @ 2,900'. POOH w/ wireline.
 - a. Record 7" and 9-5/8" casing pressures before and after shooting.
 - b. Wait for pressures to stabilize.
5. Establish circulation down the 7" casing and up the 9-5/8" surface casing. Once circulation is established, RDMO WLU.
6. PU & RIH w/ 7" 29# cement retainer on 2-7/8" 6.5 N-80 workstring. Set cement retainer @ 2,850'.
7. Sting out of retainer and test retainer to 750 psi. Sting back into retainer and establish circulation down tubing and 7" casing (below retainer) and up 7" x 9-5/8" annulus.
8. Pump cement as designed by cementing company. Report returns from 9-5/8" casing.
 - a. 55 BBL (309 cubic feet) to fill the following
 - i. 50' inside 7" below retainer above perms (2,850' to 2,900') = 1.9 BBL
 - ii. 730' in open hole by 7" annulus w/ 10% excess (2,170' to 2,900') = 21.5 BBL
 - iii. 1,000' in 7" x 9-5/8" annulus (1,170' to 2,170') = 28.2 BBL
 - b. Displace w/ 16 BBL freshwater (TBG capacity to 2,850 is 16.5 BBL).
 - c. Leave 9-5/8" surface casing shut in and monitor pressure.
9. After pumping and displacing cement, sting out of cement retainer and confirm that retainer is holding. Reverse circulate 2 bottoms up.
10. POOH w/ 2-7/8" workstring.
11. After cement is allowed to cure, open surface casing and monitor for flow. If there is no flow, pressure test the surface casing to 500 psi for 15 minutes.
12. RIH w/ 6" bit on 2-7/8" 6.5 N-80 8rd workstring and drill out cement retainer with 50' cement below @ 2,850'. Report depth that bit falls out of cement. Test casing to 2,000 psi.
13. Continue TIH w/ bit and circulate out 30' sand on top of retrievable bridge plug @ 4,000'. POOH w/ bit.
14. RIH w/ retrieving tool and retrieve RBP @ 4,000'.
15. POOH w/ RBP.
16. Begin with step 3 on Tube Up procedure (Version 2 Dated 7/1/2015).

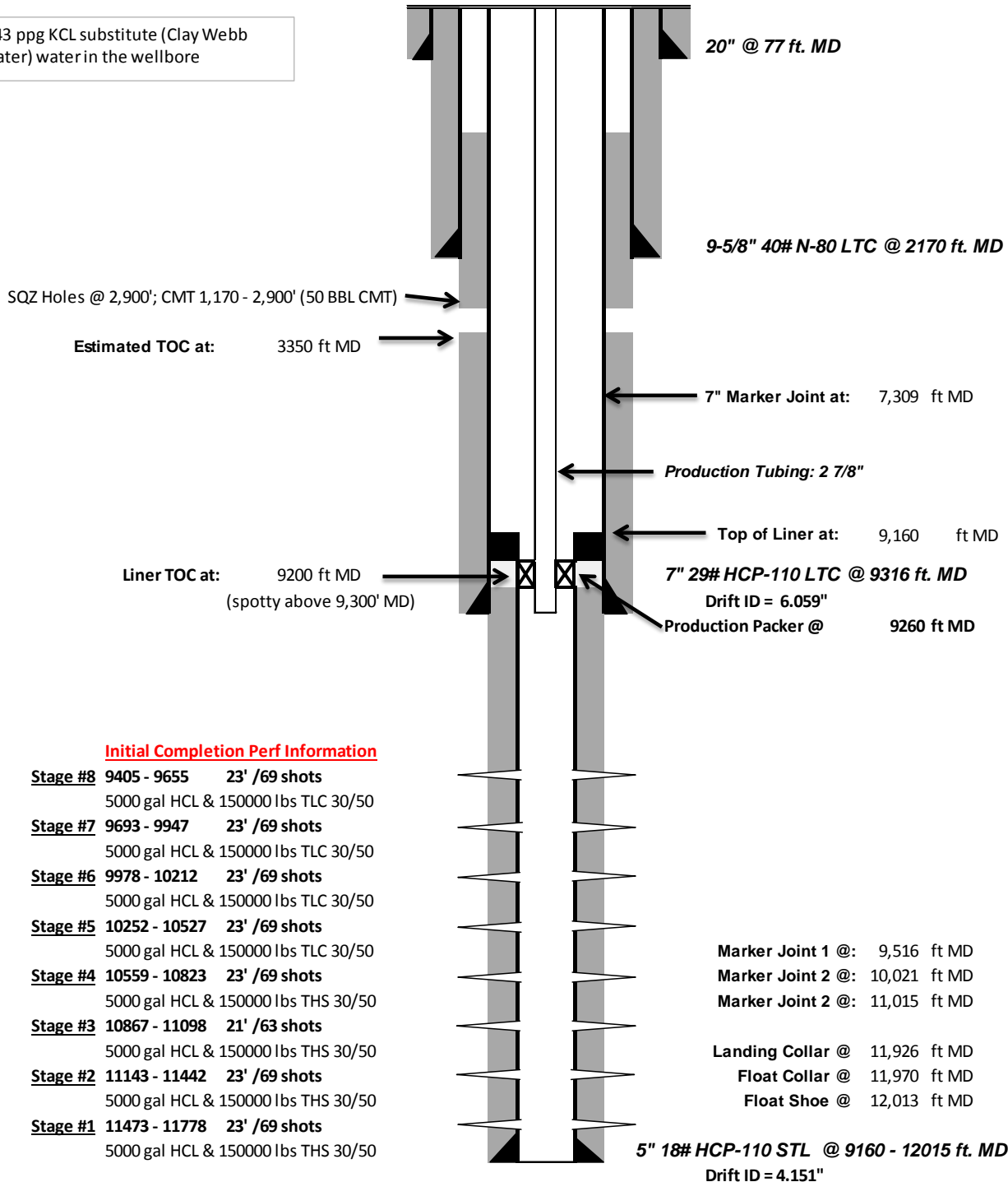


Post-Completion Wellbore Schematic

Well Name: **Woodward 4-14C4**
 Company Name: **EP Energy**
 Field, County, State: **Altamont, Duchesne, UT**
 Surface Location: **Lat: 40 13' 38.984" N Long: 110 18' 16.518" W**
 Producing Zone(s): **Wasatch**

Last Updated: **7/7/2015**
 By: **Ryan Krug**
 TD: **12,013**
 API: **4301353283**
 AFE: **161037**

8.43 ppg KCL substitute (Clay Webb Water) in the wellbore



STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MININGAMENDED REPORT ☐ FORM 8
(highlight changes)

WELL COMPLETION OR RECOMPLETION REPORT AND LOG						5. LEASE DESIGNATION AND SERIAL NUMBER:			
						6. IF INDIAN, ALLOTTEE OR TRIBE NAME			
1a. TYPE OF WELL: OIL WELL <input type="checkbox"/> GAS WELL <input type="checkbox"/> DRY <input type="checkbox"/> OTHER _____						7. UNIT or CA AGREEMENT NAME			
b. TYPE OF WORK: NEW WELL <input type="checkbox"/> HORIZ. LATS. <input type="checkbox"/> DEEP-EN <input type="checkbox"/> RE-ENTRY <input type="checkbox"/> DIFF. RESVR. <input type="checkbox"/> OTHER _____						8. WELL NAME and NUMBER:			
2. NAME OF OPERATOR:						9. API NUMBER:			
3. ADDRESS OF OPERATOR: CITY _____ STATE _____ ZIP _____					PHONE NUMBER:	10 FIELD AND POOL, OR WILDCAT			
4. LOCATION OF WELL (FOOTAGES) AT SURFACE: AT TOP PRODUCING INTERVAL REPORTED BELOW: AT TOTAL DEPTH:						11. QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:			
						12. COUNTY		13. STATE	
								UTAH	
14. DATE SPUDDED:		15. DATE T.D. REACHED:		16. DATE COMPLETED: ABANDONED <input type="checkbox"/> READY TO PRODUCE <input type="checkbox"/>		17. ELEVATIONS (DF, RKB, RT, GL):			
18. TOTAL DEPTH: MD _____ TVD _____		19. PLUG BACK T.D.: MD _____ TVD _____		20. IF MULTIPLE COMPLETIONS, HOW MANY? *		21. DEPTH BRIDGE MD _____ PLUG SET: TVD _____			
22. TYPE ELECTRIC AND OTHER MECHANICAL LOGS RUN (Submit copy of each)					23. WAS WELL CORED? NO <input type="checkbox"/> YES <input type="checkbox"/> (Submit analysis) WAS DST RUN? NO <input type="checkbox"/> YES <input type="checkbox"/> (Submit report) DIRECTIONAL SURVEY? NO <input type="checkbox"/> YES <input type="checkbox"/> (Submit copy)				
24. CASING AND LINER RECORD (Report all strings set in well)									
HOLE SIZE	SIZE/GRADE	WEIGHT (#/ft.)	TOP (MD)	BOTTOM (MD)	STAGE CEMENTER DEPTH	CEMENT TYPE & NO. OF SACKS	SLURRY VOLUME (BBL)	CEMENT TOP **	AMOUNT PULLED
25. TUBING RECORD									
SIZE	DEPTH SET (MD)	PACKER SET (MD)	SIZE	DEPTH SET (MD)	PACKER SET (MD)	SIZE	DEPTH SET (MD)	PACKER SET (MD)	
26. PRODUCING INTERVALS					27. PERFORATION RECORD				
FORMATION NAME	TOP (MD)	BOTTOM (MD)	TOP (TVD)	BOTTOM (TVD)	INTERVAL (Top/Bot - MD)	SIZE	NO. HOLES	PERFORATION STATUS	
(A)								Open <input type="checkbox"/>	Squeezed <input type="checkbox"/>
(B)								Open <input type="checkbox"/>	Squeezed <input type="checkbox"/>
(C)								Open <input type="checkbox"/>	Squeezed <input type="checkbox"/>
(D)								Open <input type="checkbox"/>	Squeezed <input type="checkbox"/>
28. ACID, FRACTURE, TREATMENT, CEMENT SQUEEZE, ETC. See attached for further information on #27 & #28.									
DEPTH INTERVAL		AMOUNT AND TYPE OF MATERIAL							
29. ENCLOSED ATTACHMENTS: All logs are submitted to UDOGM by vendor.								30. WELL STATUS:	
<input type="checkbox"/> ELECTRICAL/MECHANICAL LOGS				<input type="checkbox"/> GEOLOGIC REPORT		<input type="checkbox"/> DST REPORT		<input type="checkbox"/> DIRECTIONAL SURVEY	
<input type="checkbox"/> SUNDRY NOTICE FOR PLUGGING AND CEMENT VERIFICATION				<input type="checkbox"/> CORE ANALYSIS		<input type="checkbox"/> OTHER: _____			

31. INITIAL PRODUCTION**INTERVAL A (As shown in item #26)**

DATE FIRST PRODUCED:		TEST DATE:		HOURS TESTED:		TEST PRODUCTION RATES: →	OIL – BBL:	GAS – MCF:	WATER – BBL:	PROD. METHOD:
CHOKE SIZE:	TBG. PRESS.	CSG. PRESS.	API GRAVITY	BTU – GAS	GAS/OIL RATIO	24 HR PRODUCTION RATES: →	OIL – BBL:	GAS – MCF:	WATER – BBL:	INTERVAL STATUS:

INTERVAL B (As shown in item #26)

DATE FIRST PRODUCED:		TEST DATE:		HOURS TESTED:		TEST PRODUCTION RATES: →	OIL – BBL:	GAS – MCF:	WATER – BBL:	PROD. METHOD:
CHOKE SIZE:	TBG. PRESS.	CSG. PRESS.	API GRAVITY	BTU – GAS	GAS/OIL RATIO	24 HR PRODUCTION RATES: →	OIL – BBL:	GAS – MCF:	WATER – BBL:	INTERVAL STATUS:

INTERVAL C (As shown in item #26)

DATE FIRST PRODUCED:		TEST DATE:		HOURS TESTED:		TEST PRODUCTION RATES: →	OIL – BBL:	GAS – MCF:	WATER – BBL:	PROD. METHOD:
CHOKE SIZE:	TBG. PRESS.	CSG. PRESS.	API GRAVITY	BTU – GAS	GAS/OIL RATIO	24 HR PRODUCTION RATES: →	OIL – BBL:	GAS – MCF:	WATER – BBL:	INTERVAL STATUS:

INTERVAL D (As shown in item #26)

DATE FIRST PRODUCED:		TEST DATE:		HOURS TESTED:		TEST PRODUCTION RATES: →	OIL – BBL:	GAS – MCF:	WATER – BBL:	PROD. METHOD:
CHOKE SIZE:	TBG. PRESS.	CSG. PRESS.	API GRAVITY	BTU – GAS	GAS/OIL RATIO	24 HR PRODUCTION RATES: →	OIL – BBL:	GAS – MCF:	WATER – BBL:	INTERVAL STATUS:

32. DISPOSITION OF GAS (Sold, Used for Fuel, Vented, Etc.)**33. SUMMARY OF POROUS ZONES (Include Aquifers):**

Show all important zones of porosity and contents thereof: Cored intervals and all drill-stem tests, including depth interval tested, cushion used, time tool open, flowing and shut-in pressures and recoveries.

34. FORMATION (Log) MARKERS:

Formation	Top (MD)	Bottom (MD)	Descriptions, Contents, etc.	Name	Top (Measured Depth)

35. ADDITIONAL REMARKS (Include plugging procedure)

36. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records.

NAME (PLEASE PRINT) _____ TITLE _____

SIGNATURE _____ DATE _____

This report must be submitted within 30 days of

- completing or plugging a new well
- drilling horizontal laterals from an existing well bore
- recompleting to a different producing formation
- reentering a previously plugged and abandoned well
- significantly deepening an existing well bore below the previous bottom-hole depth
- drilling hydrocarbon exploratory holes, such as core samples and stratigraphic tests

* ITEM 20: Show the number of completions if production is measured separately from two or more formations.

** ITEM 24: Cement Top – Show how reported top(s) of cement were determined (circulated (CIR), calculated (CAL), cement bond log (CBL), temperature survey (TS)).

Send to: Utah Division of Oil, Gas and Mining
1594 West North Temple, Suite 1210
Box 145801
Salt Lake City, Utah 84114-5801

Phone: 801-538-5340

Fax: 801-359-3940

Attachment to Well Completion Report**Form 8 Dated August 3, 2015****Well Name: Woodward 4-14C4****Items #27 and #28 Continued****27. Perforation Record**

Interval (Top/Bottom – MD)	Size	No. of Holes	Perf. Status
10252'-10527'	.38	69	Open
9978'-10212'	.38	69	Open
9693'-9947'	.38	69	Open
9405'-9655'	.38	69	Open

28. Acid, Fracture, Treatment, Cement Squeeze, Etc.

Depth Interval	Amount and Type of Material
10559'-10823'	5000 gal acid, 3100# 100 mesh, 152800# 30/50 THS
10252'-10527'	5000 gal acid, 3100# 100 mesh, 150400# 30/50 TLC
9978'-10212'	5000 gal acid, 3100# 100 mesh, 150400# 30/50 TLC
9693'-9947'	5000 gal acid, 3000# 100 mesh, 150000# 30/50 TLC
9405'-9655'	5000 gal acid, 3400# 100 mesh, 144380# 30/50 TLC



Company: EP Energy
Well: Woodward 4-14C4
Location: Duchesne, UT
Rig: Precision 406

Job Number: _____
Mag Decl.: _____
Dir Driller: _____
MWD Eng: _____

Calculation Method Minimum Curvature
Proposed Azimuth 0.00
Depth Reference KB
Tie Into: Gyro/MWD

Survey Number	Survey Depth (ft)	Inclination (deg)	Azimuth (deg)	Course Length (ft)	True Vertical Depth (ft)	Vertical Section (ft)	Coordinates		Closure		Dogleg Severity (d/100')	Build Rate (d/100')	Walk Rate (d/100')	
							N/S (ft)	E/W (ft)	Distance (ft)	Direction Azimuth				
Tie In	0.00	0.00	0.00											
1	100.00	0.65	192.65	100.00	100.00	-0.56	0.56	S	0.12	W	0.57	192.65	0.65	192.65
2	200.00	0.72	188.26	100.00	199.99	-1.73	1.73	S	0.34	W	1.76	191.10	0.08	0.06
3	300.00	0.78	205.50	100.00	299.98	-2.96	2.96	S	0.72	W	3.05	193.71	0.23	0.07
4	400.00	0.60	211.39	100.00	399.97	-4.03	4.03	S	1.29	W	4.23	197.76	0.19	-0.18
5	500.00	0.33	214.00	100.00	499.97	-4.71	4.71	S	1.72	W	5.01	200.08	0.28	-0.28
6	600.00	0.53	165.03	100.00	599.97	-5.39	5.39	S	1.76	W	5.67	198.11	0.40	0.20
7	700.00	0.74	183.52	100.00	699.96	-6.47	6.47	S	1.68	W	6.69	194.58	0.29	0.21
8	800.00	0.73	207.57	100.00	799.95	-7.68	7.68	S	2.02	W	7.94	194.73	0.31	0.00
9	900.00	0.44	183.67	100.00	899.95	-8.63	8.63	S	2.34	W	8.94	195.17	0.38	-0.29
10	1000.00	0.89	187.08	100.00	999.94	-9.78	9.78	S	2.46	W	10.09	194.11	0.46	0.46
11	1100.00	1.06	195.20	100.00	1099.93	-11.44	11.44	S	2.80	W	11.78	193.73	0.21	0.16
12	1200.00	1.03	193.06	100.00	1199.91	-13.21	13.21	S	3.24	W	13.60	193.79	0.04	-0.02
13	1300.00	0.68	186.81	100.00	1299.90	-14.67	14.67	S	3.52	W	15.09	193.47	0.37	-0.36
14	1400.00	0.68	171.71	100.00	1399.89	-15.84	15.84	S	3.50	W	16.23	192.46	0.18	0.00
15	1500.00	0.98	175.10	100.00	1499.88	-17.28	17.28	S	3.34	W	17.60	190.95	0.30	0.30
16	1600.00	1.15	190.23	100.00	1599.87	-19.11	19.11	S	3.45	W	19.42	190.23	0.33	0.17
17	1700.00	1.23	196.82	100.00	1699.84	-21.12	21.12	S	3.93	W	21.48	190.55	0.16	0.08
18	1800.00	1.04	205.55	100.00	1799.82	-22.96	22.96	S	4.64	W	23.42	191.42	0.25	-0.18
19	1900.00	0.78	201.04	100.00	1899.81	-24.41	24.41	S	5.27	W	24.98	192.19	0.28	-0.27
20	2000.00	0.95	181.71	100.00	1999.80	-25.87	25.87	S	5.54	W	26.46	192.09	0.33	0.17
21	2064.00	0.99	176.97	64.00	2063.79	-26.95	26.95	S	5.53	W	27.51	191.59	0.14	0.07
22	2304.00	1.80	198.00	240.00	2303.72	-32.61	32.61	S	6.58	W	33.26	191.41	0.39	0.34
23	2400.00	2.00	196.30	96.00	2399.67	-35.65	35.65	S	7.52	W	36.43	191.91	0.22	0.21
24	2497.00	2.10	189.20	97.00	2496.61	-39.03	39.03	S	8.28	W	39.90	191.97	0.28	0.10
25	2592.00	2.10	194.70	95.00	2591.54	-42.43	42.43	S	9.00	W	43.37	191.97	0.21	0.00
26	2688.00	3.30	195.10	96.00	2687.43	-46.80	46.80	S	10.16	W	47.89	192.25	1.25	1.25
27	2784.00	3.50	192.40	96.00	2783.26	-52.33	52.33	S	11.51	W	53.58	192.41	0.27	0.21
28	2880.00	3.30	188.70	96.00	2879.10	-57.92	57.92	S	12.56	W	59.27	192.23	0.31	-0.21
29	2977.00	4.60	185.60	97.00	2975.86	-64.55	64.55	S	13.36	W	65.92	191.69	1.36	1.34
30	3073.00	4.40	187.70	96.00	3071.57	-72.03	72.03	S	14.23	W	73.43	191.17	0.27	-0.21
31	3169.00	4.50	183.70	96.00	3167.28	-79.44	79.44	S	14.97	W	80.84	190.67	0.34	0.10
32	3266.00	4.70	182.30	97.00	3263.97	-87.21	87.21	S	15.37	W	88.55	190.00	0.24	0.21
33	3362.00	4.70	181.50	96.00	3359.64	-95.07	95.07	S	15.63	W	96.35	189.34	0.07	0.00
34	3458.00	4.20	183.50	96.00	3455.35	-102.51	102.51	S	15.95	W	103.74	188.84	0.55	-0.52
35	3554.00	3.90	180.00	96.00	3551.11	-109.28	109.28	S	16.16	W	110.47	188.41	0.40	-0.31



Company: EP Energy
Well: Woodward 4-14C4
Location: Duchesne, UT
Rig: Precision 406

Job Number: _____
Mag Decl.: _____
Dir Driller: _____
MWD Eng: _____

Calculation Method Minimum Curvature
Proposed Azimuth 0.00
Depth Reference KB
Tie Into: Gyro/MWD

Survey Number	Survey Depth (ft)	Inclination (deg)	Azimuth (deg)	Course Length (ft)	True Vertical Depth (ft)	Vertical Section (ft)	Coordinates			Closure		Dogleg Severity (d/100')	Build Rate (d/100')	Walk Rate (d/100')	
							N/S (ft)	E/W (ft)		Distance (ft)	Direction Azimuth				
36	3651.00	5.30	171.70	97.00	3647.80	-117.02	117.02	S	15.52	W	118.04	187.55	1.59	1.44	-8.56
37	3747.00	5.10	170.50	96.00	3743.40	-125.61	125.61	S	14.17	W	126.41	186.44	0.24	-0.21	-1.25
38	3843.00	5.30	168.60	96.00	3839.01	-134.17	134.17	S	12.59	W	134.76	185.36	0.27	0.21	-1.98
39	3938.00	5.00	168.90	95.00	3933.63	-142.53	142.53	S	10.93	W	142.95	184.38	0.32	-0.32	0.32
40	4035.00	4.50	166.30	97.00	4030.29	-150.38	150.38	S	9.21	W	150.66	183.51	0.56	-0.52	-2.68
41	4131.00	4.40	162.90	96.00	4126.00	-157.55	157.55	S	7.24	W	157.72	182.63	0.29	-0.10	-3.54
42	4227.00	4.00	164.70	96.00	4221.74	-164.30	164.30	S	5.27	W	164.39	181.84	0.44	-0.42	1.87
43	4323.00	4.80	168.10	96.00	4317.46	-171.46	171.46	S	3.56	W	171.50	181.19	0.88	0.83	3.54
44	4420.00	4.30	171.70	97.00	4414.16	-179.03	179.03	S	2.20	W	179.05	180.70	0.59	-0.52	3.71
45	4516.00	4.00	172.90	96.00	4509.90	-185.92	185.92	S	1.26	W	185.92	180.39	0.33	-0.31	1.25
46	4612.00	3.60	175.20	96.00	4605.69	-192.24	192.24	S	0.60	W	192.24	180.18	0.45	-0.42	2.40
47	4707.00	4.40	173.30	95.00	4700.46	-198.84	198.84	S	0.08	E	198.84	179.98	0.85	0.84	-2.00
48	4801.00	4.00	175.70	94.00	4794.21	-205.69	205.69	S	0.74	E	205.69	179.79	0.46	-0.43	2.55
49	4897.00	4.70	180.10	96.00	4889.93	-212.96	212.96	S	0.99	E	212.96	179.73	0.81	0.73	4.58
50	4993.00	4.40	180.40	96.00	4985.63	-220.57	220.57	S	0.95	E	220.58	179.75	0.31	-0.31	0.31
51	5089.00	3.90	181.30	96.00	5081.38	-227.52	227.52	S	0.85	E	227.52	179.78	0.53	-0.52	0.94
52	5185.00	5.40	180.00	96.00	5177.06	-235.30	235.30	S	0.78	E	235.30	179.81	1.57	1.56	-1.35
53	5281.00	4.80	177.80	96.00	5272.68	-243.83	243.83	S	0.93	E	243.83	179.78	0.66	-0.63	-2.29
54	5376.00	4.30	179.50	95.00	5367.38	-251.37	251.37	S	1.12	E	251.37	179.75	0.55	-0.53	1.79
55	5472.00	5.40	173.30	96.00	5463.03	-259.45	259.45	S	1.68	E	259.46	179.63	1.27	1.15	-6.46
56	5568.00	4.70	172.70	96.00	5558.66	-267.84	267.84	S	2.70	E	267.85	179.42	0.73	-0.73	-0.63
57	5664.00	4.20	168.70	96.00	5654.37	-275.19	275.19	S	3.89	E	275.21	179.19	0.61	-0.52	-4.17
58	5761.00	4.70	172.70	97.00	5751.08	-282.61	282.61	S	5.09	E	282.66	178.97	0.61	0.52	4.12
59	5857.00	4.40	171.10	96.00	5846.78	-290.15	290.15	S	6.16	E	290.22	178.78	0.34	-0.31	-1.67
60	5953.00	4.00	172.30	96.00	5942.52	-297.11	297.11	S	7.18	E	297.19	178.62	0.43	-0.42	1.25
61	6049.00	5.40	177.00	96.00	6038.19	-304.94	304.94	S	7.87	E	305.04	178.52	1.51	1.46	4.90
62	6145.00	5.00	169.40	96.00	6133.80	-313.56	313.56	S	8.87	E	313.69	178.38	0.83	-0.42	-7.92
63	6240.00	5.00	171.60	95.00	6228.44	-321.73	321.73	S	10.24	E	321.89	178.18	0.20	0.00	2.32
64	6335.00	4.10	169.60	95.00	6323.14	-329.16	329.16	S	11.46	E	329.36	178.01	0.96	-0.95	-2.11
65	6431.00	4.70	177.20	96.00	6418.85	-336.47	336.47	S	12.27	E	336.69	177.91	0.87	0.63	7.92
66	6528.00	4.40	183.70	97.00	6515.55	-344.15	344.15	S	12.22	E	344.36	177.97	0.61	-0.31	6.70
67	6624.00	4.20	186.50	96.00	6611.28	-351.32	351.32	S	11.59	E	351.51	178.11	0.30	-0.21	2.92
68	6720.00	4.60	190.90	96.00	6707.00	-358.59	358.59	S	10.46	E	358.74	178.33	0.54	0.42	4.58
69	6816.00	4.40	194.10	96.00	6802.70	-365.94	365.94	S	8.83	E	366.05	178.62	0.33	-0.21	3.33
70	6912.00	4.20	195.00	96.00	6898.43	-372.91	372.91	S	7.03	E	372.97	178.92	0.22	-0.21	0.94
71	7008.00	4.20	197.20	96.00	6994.17	-379.66	379.66	S	5.08	E	379.69	179.23	0.17	0.00	2.29
72	7104.00	4.00	195.70	96.00	7089.93	-386.24	386.24	S	3.13	E	386.26	179.54	0.24	-0.21	-1.56



Company: EP Energy
Well: Woodward 4-14C4
Location: Duchesne, UT
Rig: Precision 406

Job Number: _____
Mag Decl.: _____
Dir Driller: _____
MWD Eng: _____

Calculation Method Minimum Curvature
Proposed Azimuth 0.00
Depth Reference KB
Tie Into: Gyro/MWD

Survey Number	Survey Depth (ft)	Inclination (deg)	Azimuth (deg)	Course Length (ft)	True Vertical Depth (ft)	Vertical Section (ft)	Coordinates				Closure		Dogleg Severity (d/100')	Build Rate (d/100')	Walk Rate (d/100')	
							N/S (ft)		E/W (ft)		Distance (ft)	Direction Azimuth				
73	7200.00	3.90	196.10	96.00	7185.70	-392.60	392.60	S		1.32	E	392.60	179.81	0.11	-0.10	0.42
74	7296.00	3.60	197.30	96.00	7281.49	-398.62	398.62	S		0.48	W	398.62	180.07	0.32	-0.31	1.25
75	7392.00	3.70	197.70	96.00	7377.30	-404.45	404.45	S		2.32	W	404.45	180.33	0.11	0.10	0.42
76	7488.00	3.60	198.30	96.00	7473.10	-410.26	410.26	S		4.21	W	410.28	180.59	0.11	-0.10	0.63
77	7584.00	3.70	197.10	96.00	7568.91	-416.08	416.08	S		6.06	W	416.12	180.83	0.13	0.10	-1.25
78	7680.00	3.10	208.90	96.00	7664.74	-421.31	421.31	S		8.23	W	421.39	181.12	0.96	-0.63	12.29
79	7777.00	2.00	204.50	97.00	7761.64	-425.15	425.15	S		10.20	W	425.27	181.37	1.15	-1.13	-4.54
80	7873.00	1.50	197.30	96.00	7857.60	-427.87	427.87	S		11.27	W	428.02	181.51	0.57	-0.52	-7.50
81	7967.00	1.90	194.50	94.00	7951.56	-430.56	430.56	S		12.02	W	430.72	181.60	0.43	0.43	-2.98
82	8063.00	1.40	198.80	96.00	8047.52	-433.21	433.21	S		12.80	W	433.40	181.69	0.54	-0.52	4.48
83	8159.00	1.30	197.90	96.00	8143.49	-435.35	435.35	S		13.51	W	435.56	181.78	0.11	-0.10	-0.94
84	8255.00	2.00	210.40	96.00	8239.45	-437.84	437.84	S		14.69	W	438.08	181.92	0.82	0.73	13.02
85	8351.00	1.70	219.00	96.00	8335.40	-440.39	440.39	S		16.44	W	440.69	182.14	0.42	-0.31	8.96
86	8447.00	1.80	211.90	96.00	8431.35	-442.77	442.77	S		18.13	W	443.14	182.34	0.25	0.10	-7.40
87	8543.00	2.00	202.10	96.00	8527.30	-445.61	445.61	S		19.56	W	446.03	182.51	0.40	0.21	-10.21
88	8640.00	1.30	192.70	97.00	8624.26	-448.25	448.25	S		20.44	W	448.71	182.61	0.77	-0.72	-9.69
89	8736.00	1.80	199.30	96.00	8720.23	-450.73	450.73	S		21.17	W	451.23	182.69	0.55	0.52	6.88
90	8832.00	1.10	200.10	96.00	8816.19	-453.02	453.02	S		21.99	W	453.55	182.78	0.73	-0.73	0.83
91	8927.00	1.40	176.10	95.00	8911.17	-455.04	455.04	S		22.22	W	455.58	182.80	0.63	0.32	-25.26
92	9022.00	0.90	183.10	95.00	9006.15	-456.94	456.94	S		22.19	W	457.48	182.78	0.55	-0.53	7.37
93	9118.00	1.30	198.90	96.00	9102.13	-458.72	458.72	S		22.58	W	459.28	182.82	0.52	0.42	16.46
94	9215.00	1.50	194.30	97.00	9199.11	-460.99	460.99	S		23.25	W	461.58	182.89	0.24	0.21	-4.74
95	9266.00	1.30	201.30	51.00	9250.09	-462.18	462.18	S		23.62	W	462.78	182.93	0.52	-0.39	13.73
96	9300.00	1.04	200.65	34.00	9284.08	-462.83	462.83	S		23.87	W	463.44	182.95	0.77	-0.77	-1.92
97	9400.00	0.99	180.82	100.00	9384.07	-464.54	464.54	S		24.20	W	465.17	182.98	0.35	-0.05	-19.83
98	9500.00	1.80	191.92	100.00	9484.04	-466.93	466.93	S		24.54	W	467.57	183.01	0.85	0.81	11.10
99	9600.00	1.81	178.68	100.00	9583.99	-470.04	470.04	S		24.83	W	470.70	183.02	0.42	0.01	-13.24
100	9700.00	2.14	187.60	100.00	9683.93	-473.47	473.47	S		25.04	W	474.13	183.03	0.45	0.33	8.92
101	9800.00	2.35	188.93	100.00	9783.85	-477.35	477.35	S		25.60	W	478.03	183.07	0.21	0.21	1.34
102	9900.00	2.34	188.00	100.00	9883.77	-481.39	481.39	S		26.21	W	482.10	183.12	0.04	-0.01	-0.93
103	10000.00	2.32	192.05	100.00	9983.69	-485.39	485.39	S		26.91	W	486.14	183.17	0.17	-0.01	4.05
104	10100.00	2.57	190.15	100.00	10083.59	-489.58	489.58	S		27.73	W	490.37	183.24	0.26	0.25	-1.89
105	10200.00	2.56	187.58	100.00	10183.49	-494.01	494.01	S		28.42	W	494.82	183.29	0.12	-0.01	-2.57
106	10300.00	2.66	186.85	100.00	10283.39	-498.52	498.52	S		28.99	W	499.36	183.33	0.10	0.10	-0.73
107	10400.00	2.78	184.98	100.00	10383.28	-503.24	503.24	S		29.48	W	504.10	183.35	0.15	0.12	-1.88
108	10500.00	2.43	185.14	100.00	10483.18	-507.76	507.76	S		29.88	W	508.64	183.37	0.35	-0.35	0.16
109	10600.00	2.83	183.79	100.00	10583.07	-512.33	512.33	S		30.23	W	513.22	183.38	0.41	0.41	-1.35



Company: EP Energy
Well: Woodward 4-14C4
Location: Duchesne, UT
Rig: Precision 406

Job Number: _____
Mag Decl.: _____
Dir Driller: _____
MWD Eng: _____

Calculation Method Minimum Curvature
Proposed Azimuth 0.00
Depth Reference KB
Tie Into: Gyro/MWD

Survey Number	Survey Depth (ft)	Inclination (deg)	Azimuth (deg)	Course Length (ft)	True Vertical Depth (ft)	Vertical Section (ft)	Coordinates				Closure		Dogleg Severity (d/100')	Build Rate (d/100')	Walk Rate (d/100')
							N/S (ft)		E/W (ft)		Distance (ft)	Direction Azimuth			
110	10700.00	2.89	184.67	100.00	10682.95	-517.30	517.30	S	30.60	W	518.21	183.39	0.07	0.05	0.88
111	10800.00	3.04	186.20	100.00	10782.81	-522.44	522.44	S	31.09	W	523.37	183.41	0.17	0.15	1.53
112	10900.00	2.80	185.40	100.00	10882.68	-527.50	527.50	S	31.61	W	528.45	183.43	0.24	-0.24	-0.80
113	11000.00	2.89	188.61	100.00	10982.56	-532.42	532.42	S	32.21	W	533.39	183.46	0.18	0.09	3.21
114	11100.00	3.08	186.14	100.00	11082.42	-537.58	537.58	S	32.88	W	538.58	183.50	0.23	0.20	-2.47
115	11200.00	2.83	186.22	100.00	11182.29	-542.71	542.71	S	33.43	W	543.74	183.53	0.25	-0.25	0.08
116	11300.00	2.85	187.06	100.00	11282.17	-547.63	547.63	S	34.01	W	548.69	183.55	0.05	0.02	0.84
117	11400.00	2.73	181.62	100.00	11382.05	-552.48	552.48	S	34.38	W	553.55	183.56	0.29	-0.12	-5.44
118	11500.00	2.65	182.60	100.00	11481.94	-557.17	557.17	S	34.55	W	558.24	183.55	0.09	-0.08	0.98
119	11600.00	3.06	181.75	100.00	11581.82	-562.14	562.14	S	34.74	W	563.21	183.54	0.41	0.41	-0.85
120	11700.00	3.15	185.29	100.00	11681.67	-567.54	567.54	S	35.07	W	568.62	183.54	0.21	0.10	3.54
121	11800.00	2.87	186.05	100.00	11781.53	-572.77	572.77	S	35.59	W	573.87	183.56	0.29	-0.28	0.76
122	11867.00	2.99	181.83	67.00	11848.44	-576.18	576.18	S	35.82	W	577.29	183.56	0.37	0.19	-6.30
123	12018.00	2.99	181.83	151.00	11999.24	-584.06	584.06	S	36.07	W	585.18	183.53	0.00	0.00	0.00

CENTRAL DIVISION

ALTAMONT FIELD
WOODWARD 4-14C4
WOODWARD 4-14C4
DRILLING LAND

Operation Summary Report

Disclaimer: Although the information contained in this report is based on sound engineering practices, the copyright owner(s) does (do) not accept any responsibility whatsoever, in negligence or otherwise, for any loss or damage arising from the possession or use of the report whether in terms of correctness or otherwise. The application, therefore, by the user of this report or any part thereof, is solely at the user's own risk.

1 General

1.1 Customer Information

Company	CENTRAL DIVISION
Representative	
Address	

1.2 Well Information

Well	WOODWARD 4-14C4		
Project	ALTAMONT FIELD	Site	WOODWARD 4-14C4
Rig Name/No.	PRECISION DRILLING/406	Event	DRILLING LAND
Start date	5/29/2015	End date	6/7/2015
Spud Date/Time	5/29/2015	UWI	WOODWARD 4-14C4
Active datum	KB @5,990.0ft (above Mean Sea Level)		
Afe No./Description	161037/54064 / WOODWARD 4-14C4		

2 Summary

2.1 Operation Summary

Date	Time Start-End	Duration (hr)	Phase	Activity	Sub	OP Code	MD from (ft)	Operation
5/6/2015	6:00 8:00	2.00	CASCOND	24		P	0.0	SET 77' 20" CONDUCTOR, SET MOUSE HOLE @ 80'. ADDED RKB CORRECTION FOR PD 406.
	8:00 10:00	2.00	CASSURF	24		P	77.0	DRILL 12 1/4" HOLE TO 2,173'. RAN 49 JTS 9-5/8" 40# N-80 LT&C TO 2,170'. FC @ 2,124' SHOE 2,170'. ADDED RKB CORRECTION FOR PD 406.
	10:00 14:30	4.50	CASSURF	25		P	2,173.0	M&P PUMPED 100 BBLS H2O. 500 SXS (211 BBLS) VARICEM LEAD CMT @ 12 PPG, 2.37 YLD TAILED WITH 200 SXS (46.3 BBLS) OF HALCEM CMT @ 14.3 PPG, 1.30 YIELD. RELEASED TOP PLUG. DISPLACED WITH 163 BBLS OF H2O @ 6-4 BPM. BUMPED PLUG @ 00:39 HRS 5/07/15 WITH 850 PSI. 0.5 BBL BLED BACK, FLOATS HELD. 30 BBLS CMT TO SURFACE.
	14:30 6:00	15.50	CASSURF	25		P	2,173.0	RIG DOWN & CLEAR LOCATION.
5/27/2015	6:00 6:00	24.00	MIRU	01		P	2,170.0	90% MOVED IN, 50% SPOTTED, 10% RIG UP.
5/28/2015	6:00 6:00	24.00	MIRU	01		P	2,173.0	MOVE IN & RIG UP. 100% MOVED IN 95% RIGGED UP. RELEASED TRUCKS @ 13:00 HRS 5/27/15.
5/29/2015	6:00 6:30	0.50	MIRU	01		P	2,173.0	PREP FLOOR . 100% RIGGED UP. PERFORM RIG INSPECTION. RIG ON RATE @ 06:30 HRS 5/28/15.
	6:30 14:00	7.50	CASSURF	28		P	2,173.0	NU 11" 10M BOPE & INSTALL FLOW LINE. PJSM. TORQUE BOLTS W/ WEATHERFORD.
	14:00 19:00	5.00	CASSURF	19		P	2,173.0	RU & TESTED 11" 5M ANNULAR TO 250 / 2,500 PSI AND REMAINING BOPE, FLOOR VALVES, ETC TO 250 / 5,000 PSI. TESTED CHOKE MANIFOLD TO 250 / 10,000 PSI. HELD EACH TEST 10 MINUTES. INSTALLED WEAR BUBHING.
	19:00 20:00	1.00	CASSURF	31		P	2,173.0	TESTED CSG TO 2,500 PSI. RD TESTER.
	20:00 23:00	3.00	CASSURF	14		P	2,173.0	PU RYAN DIRECTIONAL BHA. TIH. TAG UP @ 2,124'.
	23:00 0:00	1.00	CASSURF	17		P	2,173.0	S & C DRILL LINE.
	0:00 0:30	0.50	CASSURF	12		P	2,173.0	SERVICE RIG & TDU.
	0:30 1:00	0.50	CASSURF	32		P	2,173.0	DRILL OUT FLOAT EQUIP & 10' NEW HOLE F/ 2,173 - 2,183'.
	1:00 1:30	0.50	DRLINT1	33		P	2,183.0	CBU. FIT TO 15.4 EMW WITH 9.3 PPG MW & 695 PSI SURFACE PRESSURE.
	1:30 6:00	4.50	DRLINT1	07		P	2,183.0	DRILLED 2,183' - 3,026'. SPUD @ 01:40 5/29/2015.
5/30/2015	6:00 13:00	7.00	DRLINT1	07		P	3,026.0	DRILLED 3,026' - 4,277'.
	13:00 13:30	0.50	DRLINT1	12		P	4,277.0	SERVICED RIG & TDU.
	13:30 3:00	13.50	DRLINT1	07		P	4,277.0	DRILLED 4,277' - 6,288'.

2.1 Operation Summary (Continued)

Date	Time Start-End	Duratio n (hr)	Phase	Activit y	Sub	OP Code	MD from (ft)	Operation
5/31/2015	3:00 3:30	0.50	DRLINT1	12		P	6,288.0	SERVICED RIG & TDU.
	3:30 6:00	2.50	DRLINT1	07		P	6,288.0	DRILLED 6,288' - 6,450'.
	6:00 13:00	7.00	DRLINT1	07		P	6,450.0	DRILLED 6,450' - 6,960'.
	13:00 13:30	0.50	DRLINT1	12		P	6,960.0	SERVICED RIG & TDU.
	13:30 1:30	12.00	DRLINT1	07		P	6,960.0	DRILLED 6,960' - 7,827'.
	1:30 2:00	0.50	DRLINT1	12		P	7,827.0	SERVICED RIG & TDU.
	2:00 6:00	4.00	DRLINT1	07		P	7,827.0	DRILLED 7,827' - 8,040'.
6/1/2015	6:00 13:30	7.50	DRLINT1	07		P	8,040.0	DRILLED 8,040' - 8,589'.
	13:30 14:00	0.50	DRLINT1	12		P	8,589.0	SERVICED RIG & TDU.
	14:00 17:00	3.00	DRLINT1	07		P	8,589.0	DRILLED 8,589' - 8,784'.
	17:00 18:30	1.50	DRLINT1	57		N	8,784.0	TROUBLE SHOOT EM TOOL.
	18:30 22:30	4.00	DRLINT1	07		P	8,784.0	DRILLED 8,784' - 9,002'. OBSERVED WELL FLOW WITH 24 BBL GAIN.
	22:30 0:30	2.00	DRLINT1	50		N	9,002.0	SHUT IN WELL. SIDPP 137 PSI, SICP 47 PSI. CBU TROUGH FULL OPEN CHOKE @ 247 GPM. INCREASED MW 10.1 - 10.4 PPG. MAX GAS 2,782 UNITS WITH 10-12' FLARE, MC TO 8.8 PPG. LOST 47 BBLS.
	0:30 1:00	0.50	DRLINT1	07		P	9,002.0	DRILLED 9,002' - 9,072'. INCREASING MW TO 10.5 PPG. MAX BG GAS 2825 UNITS. LOST 152 BBLS.
6/2/2015	1:00 1:30	0.50	DRLINT1	12		P	9,072.0	CIRC WHILE SERVICING RIG & TDU. BG GAS 2,100 UNITS. WITH 1PPG MC. 8' FLARE.
	1:30 6:00	4.50	DRLINT1	07		P	9,072.0	DRILLED 9072' - 9,316'. INCREASED MW TO 10.7 PPG. LOSING 120 BBLS PER HOUR.
	6:00 13:00	7.00	CASINT1	15		P	9,316.0	C&C MUD TO 10.9 PPG @ 222 GPM. FC & SIMULATE CONN, WELL STATIC. CBU MAX GAS 3,022 UNITS, 4' FLARE FOR 12 MIN, NO GAIN, MC TO 8.8 PPG. C&C MUD TO 11.1 PPG. LOST 114 BBLS. FINAL BG GAS 104 UNITS. FC, HOLE TAKING MUD.
	13:00 15:00	2.00	CASINT1	13		P	9,316.0	POOH TO 7,079'. HOLE TAKING 4.4 X NORMAL FILL. LOST 57 BBLS.
	15:00 17:00	2.00	CASINT1	16		P	9,316.0	BACK REAMED RESISTANCE 7,079' - 5,847'. LOST 252 BBLS.
	17:00 22:00	5.00	CASINT1	13		P	9,316.0	FINISH OUT OF HOLE LD TOOLS.
6/3/2015	22:00 5:30	7.50	CASINT1	13		P	9,316.0	MU BIT. TIH. BREAK CIRC EVERY 1,000'. REAM TIGHT HOLE 6,030' - 6,112'. CURRENT FLUID LOST TIH 402 BBLS.
	5:30 6:00	0.50	CASINT1	15		P	9,316.0	CCM.
	6:00 10:00	4.00	CASINT1	15		P	9,316.0	C&C MUD @ 197 GPM PUMPING 10 BBL SWEEPS @ 20 PPB LCM . MAX GAS 2,964 UNITS, 8-10' FLARE 28 MIN, 6-8' FLARE 12 MIN, NO GAIN, MC TO 9.8 PPG. FINAL BG GAS 80 UNITS. FC, BALLOON 1.2 BPH FOR 40 MIN, WELL STATIC. NO LOSSES.
	10:00 15:00	5.00	CASINT1	13		P	9,316.0	POOH RACKING BACK. FC @ 6,103' - 2,142' & BHA, WELL STATIC. HOLE TOOK PROPER FILL. NO LOSSES.
	15:00 16:30	1.50	CASINT1	14		P	9,316.0	LD BHA & PULL WEAR BUSHING.
	16:30 6:00	13.50	CASINT1	24		P	9,316.0	PJSM. RU CSG CREW. MU & CHECK FLOAT EQUIP. RUN 7" 29# LT&C CSG. BREAK CIRC EVERY 1,000'. CBU @ 2,101', 6,047'.
6/4/2015	6:00 13:00	7.00	CASINT1	24		P	9,316.0	RAN 224 JTS 7" 29# HCP-110 LT&C CSG TO 9,316'. FLOAT COLLAR @ 9,274', MARKER JT @ 7,037'. BREAK CIRC EVERY 1,000', CBU @ 6,821' & 7,710'. LOST 49BBLS. TAGGED BTM WITH 20K.
	13:00 15:00	2.00	CASINT1	15		P	9,316.0	CBU @ 2.4-6 BPM & PUMPED 40 BBLS LCM @ 20 PPB (8 PPB BARO-SEAL, 12 PPB CEDAR FIBER). LOST 55 BBLS. MAX GAS 8,429 UNITS, NO GAIN , 10-15' FLARE FOR 40 MIN.

2.1 Operation Summary (Continued)

Date	Time Start-End	Duratio n (hr)	Phase	Activit y	Sub	OP Code	MD from (ft)	Operation
	15:00 18:00	3.00	CASINT1	25		P	9,316.0	RU HES. MIXED & PUMPED 40 BBLS 10.8 PPG TUNED SPACER . 1,000 SXS (340 BBLS) EXTENDACHEM LEAD CMT @ 12.5 PPG, 1.91 YLD TAILED WITH 305 SXS (89 BBLS) OF EXPANDACHEM CMT @ 13 PPG, 1.64 YIELD. RELEASED TOP PLUG. DISPLACED WITH 344 BBLS OF 10.5 PPG MUD @ 8-5 BPM. BUMPED PLUG @ 17:31 HRS 6/3/15 WITH 1,628 PSI. FINAL CIRC PRESS 1,102 PSI. 1.75 BBL BLED BACK, FLOATS HELD. RD CEMENTERS. RETURNS SLOWED 175 BBLS INTO DISP, LOST RETURNS LAST 25 BBLS. TOTAL LOST DURING CMT OPS 215 BBLS. EST TOC 2,668'. CAL 20% WASHOUT.
	18:00 19:00	1.00	CASINT1	27		P	9,316.0	LD LANDING JT. INSTALL & TEST PACK-OFF TO 5,000 PSI FOR 15MIN.
	19:00 6:00	11.00	CASINT1	14		P	9,316.0	LD DP FROM DERRICK.
6/5/2015	6:00 7:00	1.00	CASINT1	31		P	9,316.0	TEST CASING TO 2,500 PSI FOR 30 MINUTES WHILE CO TDU SAVER SUB TO 4" XT-39.
	7:00 8:00	1.00	CASINT1	19		P	9,316.0	PJSM. RU & ATTEMPT TO TEST BLINDS. CHOKE OUTLET FLANGE LEAKING.
	8:00 10:00	2.00	CASINT1	48		N	9,316.0	CHANGE OUT RING GASKET IN CHOKE OUTLET.
	10:00 14:00	4.00	CASINT1	19		P	9,316.0	TESTED 11" 5M ANNULAR TO 250 / 4,000 PSI, RAMS & REMAINING BOPE, FLOOR VALVES, ETC TO 250 / 10,000 PSI. HOLD EACH TEST 10 MINUTES.
	14:00 21:00	7.00	CASINT1	13		P	9,316.0	MU 6 - 1/8" BHA. TIH PU 4" DP TO 9,175'.
	21:00 22:30	1.50	CASINT1	17		P	9,316.0	S&C DRILL LINE.
	22:30 23:00	0.50	CASINT1	12		P	9,316.0	SERVICE RIG & TDU.
	23:00 1:00	2.00	CASINT1	32		P	9,316.0	DRILL OUT FLOAT EQUIP & 10' NEW HOLE F/ 9,316' - 9,326'.
	1:00 1:30	0.50	DRLPRD	33		P	9,326.0	CBU. FIT TO 15.4 PPG EMW WITH 11.5 PPG MW & 1890 PSI.
	1:30 6:00	4.50	DRLPRD	07		P	9,326.0	DRILLED 9,326' - 9,743'.
6/6/2015	6:00 7:00	1.00	DRLPRD	07		P	9,743.0	DRILLED 9,743' - 9,871'.
	7:00 8:30	1.50	DRLPRD	11		P	9,871.0	CBU & SL SURVEY @ 9,835' 2.34°.
	8:30 9:00	0.50	DRLPRD	07		P	9,871.0	DRILLED 9,871' - 9,934'.
	9:00 9:30	0.50	DRLPRD	55		N	9,934.0	CHANGED OUT TDU SAVER SUB & LD 1 JT 4" DP DUE TO WASHOUT.
	9:30 13:30	4.00	DRLPRD	07		P	9,934.0	DRILLED 9,934' - 10,214'.
	13:30 14:00	0.50	DRLPRD	12		P	10,214.0	SERVICED RIG & TDU.
	14:00 2:00	12.00	DRLPRD	07		P	10,214.0	DRILLED 10,214' - 11,160'.
	2:00 2:30	0.50	DRLPRD	12		P	11,160.0	SERVICED RIG & TDU.
	2:30 6:00	3.50	DRLPRD	07		P	11,160.0	DRILLED 11,160' - 11,456'.
	6:00 13:00	7.00	DRLPRD	07		P	11,456.0	DRILLED 11,456 - 11,818'.
6/7/2015	13:00 13:30	0.50	DRLPRD	12		P	11,818.0	SERVICED RIG & TDU.
	13:30 16:00	2.50	DRLPRD	07		P	11,818.0	DRILLED 11,818' - 12,018'. TD PRODUCTION 6/6/15.
	16:00 17:00	1.00	EVLPRD	15		P	12,018.0	CBU. MAX GAS 84 UNITS. NO FLARE. NO GAIN. NO MUD LOSS.
	17:00 20:00	3.00	EVLPRD	13		P	12,018.0	FC. WELL STATIC. WIPER TRIP.
	20:00 21:00	1.00	EVLPRD	15		P	12,018.0	CBU. FC. WELL STATIC. MAX GAS 187 UNITS. NO FLARE. NO GAIN. NO MUD LOSS.
	21:00 3:00	6.00	EVLPRD	13		P	12,018.0	POOH. FC @ SHOE. WELL STATIC. DROP DP RABBITT. FC @ 4,500' & BHA. WELL STATIC.
	3:00 6:00	3.00	EVLPRD	22		P	12,018.0	PJSM. RU HES. RIH WITH ULTRA SLIM COMBO TO 12,018'.
	6:00 9:00	3.00	EVLPRD	22		P	12,018.0	LOG UP WITH ULTRA SLIM COMBO F/ 12,018' - 9,314'. GR/NEU LOG F/9,314' - SURFACE.
	9:00 13:00	4.00	CASPRD1	24		P	12,018.0	PJSM. RU & RAN 68 JTS 5" 18# P-110HC STL LINER. 3 MARKER JT. MADE UP VERSAFLEX LINER HANGER ASSEMBLY & SETTING TOOL.
	13:00 14:00	1.00	CASPRD1	15		P	12,018.0	INSTALLED ROTATING ELEMENT. CIRC LINER VOLUME @ 2.5 BPM. RD CSG CREW.

2.1 Operation Summary (Continued)

Date	Time Start-End	Duration (hr)	Phase	Activity	Sub	OP Code	MD from (ft)	Operation
	14:00 20:00	6.00	CASPRD1	24		P	12,018.0	TIH W/ 5" LINER ON 4" DP @ 95 FPM TO 9,316'. BREAK CIRC & CLEAR LINER ANNULUS EVERY 1,000'. CBU @ 2.5 BPM. MAX GAS 324 UNITS, NO MC, NO FLARE FINAL BG 115 UNITS. NO LOSSES CIRC.
	20:00 22:30	2.50	CASPRD1	24		P	12,018.0	TIH @ 60 FPM WITH 5" LINER ON 4" DP. BREAK CIRC & CLEAR LINER ANNULUS EVERY 1,000'. TAG BTM WITH 20K. NO LOSSES. SPACED OUT & RU CMT HEAD.
	22:30 3:00	4.50	CASPRD1	15		P	12,018.0	CIRC 2X BU. 1- 2.5 BPM, MAX GAS 4,673 UNITS, NO MC. NO FLARE, NO GAIN. FINAL CIRC PRESSURE 554 PSI @ 2.5 BPM. NO FLUID LOSS DURING CIRCULATION. FINAL BGG 297 UNITS.
	3:00 5:30	2.50	CASPRD1	25		P	12,018.0	RU HES & TESTED LINES TO 9,000 PSI. PUMPED 20 BBLS 12.4 PPG TUNED SPACER & 370 SKS (100 BBLS) 14.2 PPG WITH 1.52 YIELD EXPANDACEM CMT @ 50% EXCESS. WASHED LINES. DROPPED DP DART. PUMPED 60 BBLS H2O WITH 2% KCL 0.1 % BIOCID, 82 BBLS 12.2 PPG MUD. BUMP PLUG @ 05:33 WITH 2,591 PSI. FINAL CIRC CIRC PRESSURE 2,035 PSI. NO LOSSES.
	5:30 6:00	0.50	CASPRD1	25		P	12,018.0	RELEASED BALL, RUPTURE DISC @ 5,377 PSI. PUMPED 52.7 BBLS, PRESSURED TO 6,143 PSI, EXPANDED HANGER. PULL TESTED LINER WITH 80K OVERPULL. SAT DOWN 70K, RELEASED SETTING TOOL FROM LINER HANGER. LANDED FS @ 12,015', FC @ 11,971', LC @ 11,926'. TOL @ 9,163'. 153' OF LAP. TOTAL LINER 2,852'. MARKER JT TOP @ 11,018', 10,025', 9,519'.
6/9/2015	6:00 7:00	1.00	CASPRD1	15		P	12,018.0	PULLED UP TO TOL. OBSERVED 2 OVERPULL OF 6K THROUGH CLAD SECTION. CIRC 1.5 TIMES ANNULAR VOLUME. 20 BBLS SPACER & 33 BBLS WEIGHTED CEMENT TO SURFACE. FC, WELL STATIC. POSITIVE TEST TOL TO 1,000 PSI FOR 10MIN, GOOD TEST.
	7:00 9:30	2.50	CASPRD1	15		P	12,018.0	PUMPED 296 BBLS H2O WITH NO ADDITIVES, 300 BBLS H2O WITH 2% KCL 0.1 % BIOCID TILL CLEAN RETURNS. RD HES. FLOW CHECK, WELL STATIC.
	9:30 17:00	7.50	CASPRD1	14		P	12,018.0	LD DP. FLUSH MUD LINES & CLEAN PITS.
	17:00 20:00	3.00	CASPRD1	29		P	12,018.0	ND BOPE.
	20:00 21:30	1.50	CASPRD1	27		P	12,018.0	INSTALL TBG HEAD & FRAC VALVE. TESTED HEAD TO 5,000 PSI FOR 30 MIN. RIG RELEASED @ 21:30 HRS 06/8/15.
	21:30 6:00	8.50	RDMO	02		P	12,018.0	RIG DOWN.
6/10/2015	6:00 6:00	24.00	RDMO	02		P	12,018.0	RIG DOWN & PREP FOR MOVE TO DUCHESNE CITY 3-19C4. 100% RIGGED DOWN.

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CENTRAL DIVISION

ALTAMONT FIELD
WOODWARD 4-14C4
WOODWARD 4-14C4
COMPLETION LAND

Operation Summary Report

Disclaimer: Although the information contained in this report is based on sound engineering practices, the copyright owner(s) does (do) not accept any responsibility whatsoever, in negligence or otherwise, for any loss or damage arising from the possession or use of the report whether in terms of correctness or otherwise. The application, therefore, by the user of this report or any part thereof, is solely at the user's own risk.

1 General

1.1 Customer Information

Company	CENTRAL DIVISION
Representative	
Address	

1.2 Well Information

Well	WOODWARD 4-14C4		
Project	ALTAMONT FIELD	Site	WOODWARD 4-14C4
Rig Name/No.		Event	COMPLETION LAND
Start date	6/24/2015	End date	
Spud Date/Time	5/29/2015	UWI	WOODWARD 4-14C4
Active datum	KB @5,990.0ft (above Mean Sea Level)		
Afe No./Description	161037/54064 / WOODWARD 4-14C4		

2 Summary

2.1 Operation Summary

Date	Time Start-End	Duration (hr)	Phase	Activity	Sub	OP Code	MD from (ft)	Operation
6/24/2015	6:00 7:30	1.50	WLWORK	28		P		CREW TRAVEL HELD SAFETY MEETING ON RIGGING UP WIRELINE. FILLED OUT JSA.
	7:30 12:00	4.50	WLWORK	22		P		RU WIRELINE TAGGED @ 11859' RAN CBL, GAMMA RAY , CCL LOG WHILE HOLDING 4000 PSI @ SURFACE. RD WIRELINE.
	12:00 15:00	3.00	SITEPRE	01		P		SPOTTED CATWALK AND PIPE RACKS. UNLOADED TBG,
	15:00 17:00	2.00	MIRU	01		P		MIRU RIG, NU 5K BOP. SHUT DOWN FOR NIGHT.
6/25/2015	6:00 7:30	1.50	WOR	28		P		CREW TRAVEL HELD SAFETY MEETING ON PICKING UP TUBING FILLED OUT JSA.
	7:30 15:30	8.00	WOR	24		P		TALLIED AND PICKED UP 4 1/8" BIT, BIT SUB, 91-JTS 2 3/8 L-80 EUE TBG, X-OVER AND 276-JTS 2 7/8 L-80 EUE TBG. TAGGED FILL @ 11907' RU POWER SWIVEL AND RAN PUMP LINES.
	15:30 19:00	3.50	WOR	10		P		WASHED DOWN FROM 11907' TO LANDING COLAR 11926' (11946' TBG MEASUREMENT) . CIRCULATE WELL CLEAN W/ 455 BBLs 2% KCL. RD POWER SWIVEL
	19:00 19:30	0.50	WOR	39		P		LD 10 JTS 2 7/8 L-80 EUE TBG. EOT @ 11614'. CLOSED IN WELL CLOSED TIW VALVE AND INSTALLED NIGHT CAP. CLOSED AND LOCKED PIPE RAMS. CLOSED CSG VALVE AND INSTALLED NIGHT CAPS. SDFN.
6/26/2015	6:00 7:30	1.50	WOR	28		P		CREW TRAVEL HELD SAFETY MEETING ON LAYING DOWN TUBING. FILLED OUT JSA.
	7:30 13:00	5.50	WOR	24		P		0 TSIP, 0 CSIP. LD 267-JTS 2 7/8 2 7/8 L-80 EUE TBG, X-OVER, 91-JTS 2 3/8 L-80 EUE TBG, BIT SUB AND BIT.
	13:00 14:00	1.00	RDMO	02		P		RD RIG AND GOT READY TO MOVE.
	14:00 15:00	1.00	WHDTRE	18		P		FILLED AND PRESSURE TEST CSG AT 6500 7" MANUAL FRAC VALVE STARTED TO LEAK.
	15:00 17:00	2.00	WHDTRE	47		N		WAIT ON AND CHANGE OUT 7" MANUAL FRAC VALVE.
	17:00 20:30	3.50	WHDTRE	16		N		PRESSURE TEST CSG @ 9000 PSI FOR 30 MINS HELD. NU AND PRESSURE TESTED @ 9000 PSI SPOOL, 5" HCR VALVE. CROSS FLOW.5" HCR VALVE, GOAT HEAD AND WIRELINE FLANGE. CLOSED IN WELL CLOSED AND LOCKED FRAC VALVES. CLOSED CSG VALVES AND INSTALLED NIGHT CAPS.
6/27/2015	6:00 6:30	0.50	SITEPRE	28		P		HELD SAFETY MEETING ON RUNNING FLOWBACK LINES. FILLED OUT JSA.

2.1 Operation Summary (Continued)

Date	Time Start-End	Duratio n (hr)	Phase	Activit y	Sub	OP Code	MD from (ft)	Operation
	6:30 7:00	0.50	FB	17		P		SURFACE CASING 170 SHUT IN PRESSURE. BLED DOWN WELL STILL FLOWING A LITTLE WATER @ 1 BBL PER HR. CALL STATE TO GET APPROVAL.
	7:00 11:00	4.00	SITEPRE	01		P		RAN FLOWBACK LINES, RAN WATER TRANSFER LINES AND TRANSFERRED WATER.
	11:00 13:00	2.00	STG01	21		P		GOT STATE APPROVAL TO CONTINUE .MIRU WIRELINE PERFORATED STAGE #1 FROM 11778' TO 11473'. ALL PERFS CORRELATED TO THE PERFORATORS RADIAL CBL, GAMMA RAY, CCL LOG RUN #1 DATED 23-JUNE-2015. 23 NET FT. 69 SHOTS. 2 3/4" GUNS, 16 GM CHARGES, 3 SPF, 120 PHASING. STARTING PRESSURE 1000 PSI. FINAL PRESSURE 1100 PSI. RD WIRELINE. CLOSED IN WELL CLOSED AND LOCKED FRAC VALVES CLOSED CSG VALVES AND INSTALL NIGHT CAPS.
	13:00 20:00	7.00	SITEPRE	18		P		CONTINUED HAULING WATER. SDFN
6/28/2015	6:00 6:30	0.50	SITEPRE	28		P		HELD SAFETY MEETING ON HEATING FRAC WATER, FILLED OUT JSA.
	6:30 18:00	11.50	SITEPRE	18		P		HEAT FRAC WATER AND FINISH HAULING WATER.
6/29/2015	6:00 6:30	0.50	SITEPRE	28		P		HELD SAFETY MEETING ON RIGGING UP FRAC EQUIPMENT. FILLED OUT JSA.
	6:30 18:00	11.50	SITEPRE	18		P		MIRU FRAC EQUIPMENT. FINISHED HEATING WATER. OPENED SURFACE CSG TO FLOW BACK TANK. @ 11:00 AM.
	4:00 5:00	1.00	WLWORK	18		P		RU WIRELINE TO RUN TEMP AND CCL LOG.
6/30/2015	6:00 7:00	1.00	WLWORK	22		P		FINISHED RUNNING TEMPERATURE SURVEY AND CCL LOG. SURFACE CSG MADE 1.5 BBL STILL TRICKLING INTO FLOW BACK TANK 7" CSG 800 CSIP.
	7:00 7:30	0.50	STG01	28		P		HELD SAFETY MEETING ON PUMPING HIGH PRESSURE. FILLED OUT JSA.
	7:30 8:30	1.00	STG01	18		P		STARTED FRAC EQUIPMENT AND PRESSURE TEST LINES @ 9575 PSI..
	8:30 10:00	1.50	STG01	35		P		OPENED UP WELL W/ 786 PSI. BREAK DOWN STAGE # 1 PERFS @ 4815 PSI, 9.7 BPM, 10 BBLS PUMPED. EST INJ RATE 47 BPM, 6400 PSI. STEP RATE TEST 29 OPEN PERFS. I.S.I.P. 4744 PSI. F.G. .841, 5 MIN 4592 PSI, 10 MIN 4535 PSI. TREATED PERFS W/ 5000 GALS 15% HCL ACID. PUMPED 3100 LBS 100 MESH IN 1/2 PPG STAGE AND 150400 LBS THS 30/50. IN .5#, 1#, 2# AND 3# STAGES. AVG RATE 71.4 BPM, MAX RATE 75.4 BPM. AVG PRESS 5762, MAX PRESS 7927. I.S.I.P. 5025 PSI. F.G. .865. SHUT WELL IN 3920 BBLS TO RECOVER. TURNED WELL OVER TO WIRELINE
	10:00 11:30	1.50	STG02	21		P		RU WIRELINE SET CBP @ 11457' W/ 4800 PSI. PERFORATED STAGE #2 FROM 11442' TO 11143'. ALL PERFS CORRELATED TO THE PERFORATORS RADIAL CBL, GAMMA RAY, CCL LOG RUN #1 DATED 23-JUNE-2015. 23 NET FT. 69 SHOTS. 2 3/4" GUNS, 16 GM CHARGES, 3 SPF, 120 PHASING. STARTING PRESSURE 4800 PSI. FINAL PRESSURE 4400 PSI. RD WIRELINE. TURNED WELL OVER TO FRAC CREW
	11:30 13:15	1.75	STG02	35		P		PRESS TEST LINES @ 9570 PSI. OPENED UP WELL W/ 4470 PSI. BREAK DOWN STAGE # 2 PERFS @ 4682 PSI, 9.7 BPM, 12 BBLS PUMPED. EST INJ RATE 43.8 BPM, 5242 PSI. STEP RATE TEST 29 OPEN PERFS. I.S.I.P. 4575 PSI. F.G. .838, 5 MIN 4423 PSI, 10 MIN 4377 PSI. TREATED PERFS W/ 5000 GALS 15% HCL ACID. PUMPED 3200 LBS 100 MESH IN 1/2 PPG STAGE AND 150200 LBS THS 30/50. IN .5#, 1#, 2# AND 3# STAGES. AVG RATE 73.9 BPM, MAX RATE 76.3 BPM. AVG PRESS 5555, MAX PRESS 7759. I.S.I.P. 4729 PSI. F.G. .852. SHUT WELL IN 3843 BBLS TO RECOVER. TURNED WELL OVER TO WIRELINE

2.1 Operation Summary (Continued)

Date	Time Start-End	Duration (hr)	Phase	Activity	Sub	OP Code	MD from (ft)	Operation
	13:15 15:00	1.75	STG03	21		P		RU WIRELINE SET CBP @ 11113' W/ 4700 PSI. PERFORATED STAGE #3 FROM 11098' TO 10867'. ALL PERFS CORRELATED TO THE PERFORATORS RADIAL CBL, GAMMA RAY, CCL LOG RUN #1 DATED 23-JUNE-2015. 21 NET FT. 63 SHOTS. 2 3/4" GUNS, 16 GM CHARGES, 3 SPF, 120 PHASING. STARTING PRESSURE 4700 PSI. FINAL PRESSURE 4600 PSI. RD WIRELINE. TURNED WELL OVER TO FRAC CREW
	15:00 16:30	1.50	STG03	35		P		PRESS TEST LINES @ 9522 PSI. OPENED UP WELL W/ 4541 PSI. BREAK DOWN STAGE # 3 PERFS @ 5013 PSI, 9.5 BPM, 6 BBLS PUMPED. EST INJ RATE 47.7 BPM, 5577 PSI. STEP RATE TEST. ? OPEN PERFS. I.S.I.P. 4786 PSI. F.G. .870, 5 MIN 4672 PSI, 10 MIN 4652 PSI. TREATED PERFS W/ 5000 GALS 15% HCL ACID. PUMPED 3100 LBS 100 MESH IN 1/2 PPG STAGE AND 152500 LBS THS 30/50. IN .5#, 1#, 2# AND 3# STAGES. AVG RATE 73.3 BPM, MAX RATE 76.1 BPM. AVG PRESS 5674 , MAX PRESS 7687. I.S.I.P. 4796 PSI. F.G. .873. SHUT WELL IN 3835 BBLS TO RECOVER. TURNED WELL OVER TO WIRELINE
	16:30 18:30	2.00	STG04	21		P		RU WIRELINE SET CBP @ 10838' W/ 4700 PSI. PERFORATED STAGE #4 FROM 10823' TO 10559'. ALL PERFS CORRELATED TO THE PERFORATORS RADIAL CBL, GAMMA RAY, CCL LOG RUN #1 DATED 23-JUNE-2015. 23 NET FT. 69 SHOTS. 2 3/4" GUNS, 16 GM CHARGES, 3 SPF, 120 PHASING. STARTING PRESSURE 4700 PSI. FINAL PRESSURE 4500 PSI. CLOSED IN WELL CLOSED AND LOCKED FRAC VALVES CLOSED CSG VALVES AND INSTALL NIGHT CAPS.
7/1/2015	6:00 7:30	1.50	STG04	28		P		SURFACE CSG 250 SIP. PRESSURE BLED DOWN. STILL TRICKLING TO FLOW BACK TANK. HELD SAFETY MEETING ON PUMPING HIGH PRESSURE FILLED OUT JSA. STARTED EQUIPMENT. OPENED UP WELL W/ 4338 PSI. BREAK DOWN STAGE # 4 PERFS @ 4691 PSI, 9.3 BPM, 10 BBLS PUMPED. EST INJ RATE 44.3 BPM, 5467 PSI. STEP RATE TEST 40 OPEN PERFS. I.S.I.P. 4690 PSI. F.G. .872, 5 MIN 4514 PSI, 10 MIN 4461 PSI. TREATED PERFS W/ 5000 GALS 15% HCL ACID. PUMPED 3100 LBS 100 MESH IN 1/2 PPG STAGE AND 152800 LBS THS 30/50. IN .5#, 1#, 2# AND 3# STAGES. AVG RATE 73.1 BPM, MAX RATE 75.9 BPM. AVG PRESS 5633, MAX PRESS 7324. I.S.I.P. 4922 PSI. F.G. .893. SHUT WELL IN 3850 BBLS TO RECOVER. TURNED WELL OVER TO WIRELINE
	7:30 8:20	0.83	STG05	21		P		RU WIRELINE SET CBP @ 10542' W/ 4500 PSI. PERFORATED STAGE # FROM 10527' TO 10423'. HAD MISFIRE.
	8:20 9:45	1.42	STG05	55		N		HAD MISFIRE FIRE. PULLED OUT W/ GUN. SWITCH HAD SHRAPNEL IN IT CAUSING IT TO SHORT OUT. CHANGED SWITCH RIH TO PERFORATE.
	9:45 10:30	0.75	STG05	21		P		CONTIUNED PERFORATING STAGE #5 FROM 10418' TO 10252'. ALL PERFS CORRELATED TO THE PERFORATORS RADIAL CBL, GAMMA RAY, CCL LOG RUN #1 DATED 23-JUNE-2015. A TOTAL OF 23 NET FT. 69 SHOTS. 2 3/4" GUNS, 16 GM CHARGES, 3 SPF, 120 PHASING. STARTING PRESSURE 4500 PSI. FINAL PRESSURE 4100 PSI. RD WIRELINE. TURNED WELL OVER TO FRAC CREW

2.1 Operation Summary (Continued)

Date	Time Start-End	Duration (hr)	Phase	Activity	Sub	OP Code	MD from (ft)	Operation
	10:30 12:00	1.50	STG05	35		P		PRESSURE TEST LINES @ 9467 PSI. OPENED UP WELL W/ 4065 PSI. BREAK DOWN STAGE # 5 PERFS @ 4536 PSI, 9.6 BPM, 9 BBLS PUMPED. EST INJ RATE 43.5 BPM, 5212 PSI. STEP RATE TEST 33 OPEN PERFS. I.S.I.P. 4267 PSI. F.G. .844, 5 MIN 4092 PSI, 10 MIN 4037 PSI. TREATED PERFS W/ 5000 GALS 15% HCL ACID. PUMPED 3100 LBS 100 MESH IN 1/2 PPG STAGE AND 150,400 LBS TLC 30/50. IN .5#, 1#, 2# AND 3# STAGES. AVG RATE 73.5 BPM, MAX RATE 75.7 BPM. AVG PRESS 5209, MAX PRESS 6601. I.S.I.P. 4603 PSI. F.G. .876. SHUT WELL IN 3844 BBLS TO RECOVER. TURNED WELL OVER TO WIRELINE
	12:00 13:30	1.50	STG06	21		P		RU WIRELINE SET CBP @ 10227' W/ 4300 PSI. PERFORATED STAGE #6 FROM 10212' TO 9978'. ALL PERFS CORRELATED TO THE PERFORATORS RADIAL CBL, GAMMA RAY, CCL LOG RUN #1 DATED 23-JUNE-2015. 23 NET FT. 69 SHOTS. 2 3/4" GUNS, 16 GM CHARGES, 3 SPF, 120 PHASING. STARTING PRESSURE 4300 PSI. FINAL PRESSURE 4100 PSI. RD WIRELINE. TURNED WELL OVER TO FRAC CREW
	13:30 15:00	1.50	STG06	35		P		PRESSURE TEST LINES @ 9587 PSI. OPENED UP WELL W/ 4021 PSI. BREAK DOWN STAGE # 6 PERFS @ 4498 PSI, 9.6 BPM, 7 BBLS PUMPED. EST INJ RATE 43.6 BPM, 4646 PSI. STEP RATE TEST 35 OPEN PERFS. I.S.I.P. 4008 PSI. F.G. .830, 5 MIN 3898 PSI, 10 MIN 3894 PSI. TREATED PERFS W/ 5000 GALS 15% HCL ACID. PUMPED 3100 LBS 100 MESH IN 1/2 PPG STAGE AND 150,400 LBS TLC 30/50. IN .5#, 1#, 2# AND 3# STAGES. AVG RATE 72.4 BPM, MAX RATE 75.4 BPM. AVG PRESS 5053, MAX PRESS 6426. I.S.I.P. 4483 PSI. F.G. .877. SHUT WELL IN 3848 BBLS TO RECOVER. TURNED WELL OVER TO WIRELINE
	15:00 16:15	1.25	STG07	21		P		RU WIRELINE SET CBP @ 9962' W/ 4000 PSI. PERFORATED STAGE # 7 FROM 9947' TO 9693'. ALL PERFS CORRELATED TO THE PERFORATORS RADIAL CBL, GAMMA RAY, CCL LOG RUN #1 DATED 23-JUNE-2015. 23 NET FT. 69 SHOTS. 2 3/4" GUNS, 16 GM CHARGES, 3 SPF, 120 PHASING. STARTING PRESSURE 4000 PSI. FINAL PRESSURE 3800 PSI. RD WIRELINE. TURNED WELL OVER TO FRAC CREW
	16:15 18:15	2.00	STG07	35		P		PRESSURE TEST LINES @ 9487 PSI. OPENED UP WELL W/ 3624 PSI. BREAK DOWN STAGE # 7 PERFS @ 4204 PSI, 9.7 BPM, 6 BBLS PUMPED. EST INJ RATE 44.3 BPM, 4833 PSI. STEP RATE TEST 30 OPEN PERFS. I.S.I.P. 3845 PSI. F.G. .825, 5 MIN 3637 PSI, 10 MIN 3586 PSI. TREATED PERFS W/ 5000 GALS 15% HCL ACID. PUMPED 3000 LBS 100 MESH IN 1/2 PPG STAGE AND 150,000 LBS TLC 30/50. IN .5#, 1#, 2# AND 3# STAGES. AVG RATE 71.9 BPM, MAX RATE 75.5 BPM. AVG PRESS 4856, MAX PRESS 6296. I.S.I.P. 4182 PSI. F.G. .859. SHUT WELL IN 3813 BBLS TO RECOVER. TURNED WELL OVER TO WIRELINE
	18:15 20:00	1.75	STG08	21		P		RU WIRELINE SET CBP @ 9670' W/ 3800 PSI. PERFORATED STAGE # 8 FROM 9655' TO 9405'. ALL PERFS CORRELATED TO THE PERFORATORS RADIAL CBL, GAMMA RAY, CCL LOG RUN #1 DATED 23-JUNE-2015. 23 NET FT. 69 SHOTS. 2 3/4" GUNS, 16 GM CHARGES, 3 SPF, 120 PHASING. STARTING PRESSURE 3800 PSI. FINAL PRESSURE 3600 PSI. CLOSED IN WELL. CLOSED AND LOCKED FRAC VALVES CLOSED CSG VALVES AND INSTALL NIGHT CAPS. RD WIRELINE. SDFN
7/2/2015	6:00 7:00	1.00	STG08	28		P		HELD SAFETY MEETING ON PUMPING HIGH PRESSURE. FILLED OUT JSA. STARTED FRAC EQUIPMENT. SURFACE CSG 150 SIP PRESSURE BLED DOWN. STILL TRICKLING TO FLOW BACK TANK

2.1 Operation Summary (Continued)

Date	Time Start-End	Duration (hr)	Phase	Activity	Sub	OP Code	MD from (ft)	Operation
	7:00 8:30	1.50	STG08	35		P		PRESSURE TEST LINES @ 9562 PSI. OPENED UP WELL W/ 3230 PSI. BREAK DOWN STAGE # 8 PERFS @ 3879 PSI, 9.8 BPM, 10.5 BBLS PUMPED. EST INJ RATE 44.1 BPM, 4440 PSI. STEP RATE TEST 30 OPEN PERFS. I.S.I.P. 3728 PSI. F.G. .824, 5 MIN 3465 PSI, 10 MIN 3346 PSI. TREATED PERFS W/ 5000 GALS 15% HCL ACID. PUMPED 3400 LBS 100 MESH IN 1/2 PPG STAGE AND 144380 LBS TLC 30/50. IN .5#, 1#, 2# AND 3# STAGES. AVG RATE 75 BPM, MAX RATE 75.5 BPM. AVG PRESS 4434, MAX PRESS 5301. I.S.I.P. 4075 PSI. F.G. .861. SHUT WELL IN 3876 BBLS TO RECOVER. CLOSED IN WELL. CLOSED AND LOCKED FRAC VALVES CLOSED CSG VALVES AND INSTALLED NIGHT CAPS.
	8:30 12:00	3.50	RDMO	02		P		RD FRAC EQUIPMENT. CLEANED LOCATION AND MOVED EQUIPMENT TO 2-14C4. SDFN.
7/3/2015	6:00 6:00	24.00	CTU	42		P		NO ACTIVITY
7/4/2015	6:00 11:00	5.00	CTU	28		P		WAIT ON COIL TUBING. HELD SAFETY MEETING ON RIGGING UP COIL TUBING.
	11:00 12:30	1.50	MIRU	01		P		SPOT IN EQUIPMENT RUN PUMPLINES. COIL TUBING UNIT GOT LEAK IN RADIATOR,
	12:30 18:30	6.00	CTU	54		N		COIL TUBING GOT HOLE IN RADITOR HAD TO WAIT FOR TRUCK OUT OF ROCKSPRINGS.
	18:30 21:30	3.00	CTU	18		P		FINISHED RU COIL TUBING MADE UP DRILLOUT ASSEMBLY W/ 4 1/8" JZ ROCK BIT.
	21:30 6:00	8.50	CTU	10		P		RIH PUMPING 1/2 BPM AND RETURNING 1/2 BPM TO LINER TOP INCREASED RATE TO 2 3/4 BPM. AND RETURNING 3 3/4 BPM DRILLOUT CBPs@ 9670', 9962', 10227', 10542', 10838', 11113' AND 11457'. CLEANED OUT TO PBTD 11946' COIL MEASUREMENT. CIRCULATE CLEAN ON BTM FOR 1HR, PULLED TO LINER TOP CIRCULATE FOR 1 HR.SOOH.
7/5/2015	6:00 6:30	0.50	CTU	28		P		FINISHED TOOH BUMPED UP HELD SAFETY MEETING ON RD COIL TUBING.
	6:30 9:00	2.50	CTU	02		P		LD BHA, BLEW COIL DRY RD COIL TUBING UNIT. OPENED WELL ON 12/64 CHOKE W/ 3200 PSI.
	9:00 6:00	21.00	FB	19		P		3000 PSI ON 12/64 CHOKE. RECOVERED 0 MCF, 0 BBLS OIL, 1157 BBLS H2O.
7/6/2015	6:00 6:30	0.50	FB	28		P		HELD SAFETY MEETING ON FLOWBACK PROCEDURES FILLED OUT JSA
	6:30 6:30	0.00	FB	19		P		2750 PSI ON 12/64 CHOKE. RECOVERED 108 MCF, 74 BBLS OIL, 939 BBLS H2O.
7/7/2015	6:00 6:30	0.50	FB	28		P		HELD SAFETY MEETING ON FLOWBACK PROCEDURES. FILLED OUT JSA.
	6:30 6:00	23.50	FB	19		P		2650 PSI ON 12/64 CHOKE. RECOVERED 228 MCF, 246 BBLS OIL, 856 BBLS H2O.
7/8/2015	6:00 6:30	0.50	FB	28		P		HELD SAFETY MEETING ON FLOWBACK PROCEDURES FILLED OUT JSA
	6:30 6:00	23.50	FB	19		P		2650 PSI ON 12/64 CHOKE. RECOVERED 228 MCF, 246 BBLS OIL, 856 BBLS H2O.
7/9/2015	6:00 7:30	1.50	WOR	28		P		TRAVEL TO LOCATION. HOLD SAFETY MEETING ON WIRELINE SAFETY. FILL OUT & REVIEW JSA
	7:30 10:30	3.00	WOR	27		P		RU WIRELINE UNIT. RIH & SET PKR @ 9260'. POOH W/ SETTING TOOL & RD WIRELINE UNIT
	10:30 12:30	2.00	WOR	16		P		ND FRAC STACK. NU 5K BOP. PRESSURE TEST BOP. BLIND RAMS LEAKED
	12:30 15:30	3.00	WOR	48		N		WAIT ON & INSTALL BLIND RAMS IN BOP. PRESSURE TEST FAILED. FRAC VALVE WAS LEAKING FROM TOP DOWN.

2.1 Operation Summary (Continued)

Date	Time Start-End	Duration (hr)	Phase	Activity	Sub	OP Code	MD from (ft)	Operation
7/10/2015	15:30 16:30	1.00	WOR	27		P		RU WIRELINE UNIT. RIH & SET WRBP @ 4010' (COLLAR @ 3996'). SDFN
	6:00 7:30	1.50	WOR	28		P		TRAVEL TO LOCATION. HOLD SAFETY MEETING ON NIPPLING DOWN FRAC VALVE. FILL OUT & REVIEW JSA
	7:30 9:30	2.00	WOR	48		N		ND BOP & FRAC VALVE. NU REPLACEMENT FRAC VALVE & SAME BOP. PRESSURE TEST BOP & FRAC VALVE.
	9:30 11:30	2.00	WLWORK	04		P		MADE 2 DUMP BAILER RUNS DUMPING 30' SAND ON WRBP. PRESSURE TEST 7" CSG & WRBP TO 2000 PSI FOR 10 MINUTES. TESTED GOOD
	11:30 13:00	1.50	WLWORK	21		P		RIH & SHOT SQUEEZE PERFORATIONS @ 2900', USING 3-1/8" HSC PERF GUN, 19 GRAM CHARGES, 4 JSPF. 7" CSG PRESSURE 500 PSI. 9-5/8" CSG PRESSURE 250 PSI. 7" CSG PRESSURE 500 PSI. PRESSURE DID NOT CHANGE AFTER PERFORATING. POOH W/ PERF GUN
	13:00 14:30	1.50	WOR	06		P		PUMP 110 BBL;S 2% KCL DOWN 7" CSG @ 3.5 BPM. BEGINNING PRESSURE 1400 PSI. ENDING PRESSURE 1000 PSI @ 3.5 BPM.
	14:30 15:30	1.00	WOR	44		N		WAIT ON ORDERS & STATE APPROVAL.
	15:30 17:00	1.50	WLWORK	26		P		RIH & SET COMPOSITE CMT RETAINER @ 2850'. POOH & RD WIRELINE UNIT
	17:00 19:00	2.00	WOR	24		P		MU STINGER & TIH W/ 87 JTS 2-7/8"EUE TBG. STING INTO CMT RETAINER
7/11/2015	19:00 23:30	4.50	WOR	05		P		RU HALIBURTON CMT EQUIPMENT. PRESSURE TEST LINES TO 3500 PSI. TESTED GOOD. PRESSURE TEST CSG TO 750 PSI. PUMP 100 SX (29.56 BBLs) 13.5 PPG 1.66 YIELD CMT , STAGING LAST 2 BBLs. HESITATING 15 MINUTES BETWEEN EACH 1 BBL STAGE. PRESSURE CLIMBED TO 612 PSI WHILE PUMPING LAST BBL CMT @ 1/2 BPM. STING OUT OF RETAINER. REVERSE OUT LEAVING 1/2 BL CMT ON RETAINER. RD CMT EQUIPMENT. POOH W/ 11JTS 2-7/8"EUE TBG. SDFN
	6:00 8:00	2.00	WOR	28		P		TRAVEL TO LOCATION. HOLD SAFETY MEETING ON TRIPPING TBG. FILL OUT & REVIEW JSA.
	8:00 9:00	1.00	WOR	39		P		TOOH W/ 76 JTS 2-7/8"EUE TBG & STINGER.
	9:00 13:30	4.50	WOR	18		P		MONITOR PRESSURE BUILD UP ON SURFACE CSG. PRESSURE BUILT TO 95 PSI.
	13:30 16:00	2.50	WOR	27		P		RU WIRELINE UNIT. RIH & SHOOT SQUEEZE HOLES @ 2180'. POOH W/ PERF GUN. PRESSURE UP TO 1200 PSI ON 7" CSG. WELL STARTED CIRCULATING UP 9-5/8" SURFACE CSG. CIRCULATE 10 BBLs. PRESSURE DROPPED TO 500 PSI. RIH & SET COMPOSITE CMT RETAINER @ 2150'. RD WIRE LINE UNIT.
7/12/2015	16:00 18:00	2.00	WOR	39		P		TIH W/ STINGER & 67 JTS 2-7/8"EUE TBG. STING INTO CMT RETAINER. PUMP 20 BBLs 2% KCL WTR DOWN TBG & CIRCULATING UP 9-5/8" SRFACE CSG, PUMPING 3.9 BPM @ 500 PSI. SDFN
	6:00 7:30	1.50	WOR	28		P		TRAVEL TO LOCATION. HOLD SAFETY MEETING ON PUMPING CMT. FILL OUT & REVIEW JSA
	7:30 8:30	1.00	WOR	06		P		UNSTING FROM CMT RETAINER. CIRCULATE OIL FROM WELL BORE. STING INTO CMT RETAINER. CIRCULATE 20 BBLs PUMPING DOWN 2-7/8"EUE TBG & UP 9-5/8" CSG. DID NOT LOSE ANY FLUID.
	8:30 10:00	1.50	WOR	05		P		RU HALIBURTON CMT EQUIPMENT. PRESSURE TEST LINES TO 5000 PSI. CIRCULATE WELL W/ 10 BBLs FRESH WTR. PUMP 100 SX 13.5 PPG, 1.67 YIELD CMT DOWN TBG & UP 9-5/8" SURFACE CSG, CLOSING VALVE ON SURFACE CSG & SQUEEZING LAST 2 BBLs, PRESSURING UP TO 2100 PSI. UNSTING FROM CMT RETAINER. REVERSE OUT PUMPING 2 TIME TBG VOL. RD HALIBURTON.

2.1 Operation Summary (Continued)

Date	Time Start-End	Duration (hr)	Phase	Activity	Sub	OP Code	MD from (ft)	Operation
	10:00 12:00	2.00	WOR	39		P		TIH W/ 6" BIT, BIT SUB, 6 3-1/2"OD DRILL COLLARS, X-OVER & 46 JTS 2-7/8"EUE TBG. SDFN
7/13/2015	6:00 7:30	1.50	WOR	28		P		TRAVEL TO LOCATION. HOLD SAFETY MEETING ON POWER SWIVEL SAFETY. FILL OUT & REVIEW JSA.
	7:30 14:30	7.00	WOR	10		P		RU POWER SWIVEL. DRILL CMT FROM 2108' TO CMT RETAINER SET & 2140' TO CMT RETAINER SET @ 2150'. DRILL CMT RETAINER CMT & CMT STRINGERS TO 2227'.
	14:30 17:00	2.50	WOR	18		P		PRESSURE TEST 7" CSG TO 1860 PSI. PRESSURE HELD STEADY FOR 1 HR W/ NO FLOW ON 9-5/8" CSG. SHUT IN 9-5/8" CSG & MONITOR FOR 30 MINUTES. SAW NO PRESSURE BUILD UP. RD POWER SWIVEL. TIH & TAG CMT ON RETAINER # 1. SDFN
7/14/2015	6:00 7:30	1.50	WOR	28		P		TRAVEL TO LOCATION. HOLD SAFETY MEETING ON POWER SWIVEL SAFETY. FILL OUT & REVIEW JSA
	7:30 14:30	7.00	WOR	10		P		RU POWER SWIVEL. ESTABLISH REVERSE CIRCULATION. DRILL CMT 12' CMT ON CMT RETAINER SET @ 2850'. DRILL CMT RETAINER, CMT & STRINGERS TO 2935'. CIRCULATE WELL CLEAN.
	14:30 15:30	1.00	WOR	18		P		PRESSURE TEST 7" CSG TO 1800 PSI. PRESSURE DROPPED TO 625 PSI IN 15 MINUTES. ESTABLISH INJECTION RATE OF 1 BPM @ 1400 PSI.
	15:30 16:30	1.00	WOR	39		P		RD POWER SWIVEL. TOO H W/TBG DRILL COLLARS & BIT. SDFN
7/15/2015	6:00 7:30	1.50	WOR	28		P		TRAVEL TO LOCATION. HOLD SAFETY MEETING ON WIRELINE SAFETY. FILL OUT & REVIEW JSA
	7:30 9:00	1.50	WOR	27		P		RU WIRELINE UNIT. RIH & SET COMPOSITE CMT RETAINER @ 2860'. POOH W/ SETTING TOOL. RD WIRE LINE UNIT
	9:00 10:00	1.00	WOR	39		P		TIH & STING INTO RETAINER SET @ 2860'
	10:00 14:30	4.50	WOR	05		P		RU HALLIBURTON CMT EQUIPMENT. PRESSURE TEST 7" ANNULUS TO 750 PSI. TESTED GOOD. PRESSURE TEST LINES TO 3500 PSI. PUMP 10 BBLS FRESH WTR TO ESTABLISH INJECTION RATE 1.5 BPM @ 1700 PSI. MIX & PUMP 100 SX 13.5 PPG, 1.67 YIELD CMT. DISPLACE W/ 10 BBLS FRESH WTR, LEAVING 6.5 BBLS CMT IN TBG. STAGE CMT, WAITING 1/2 HR & PUMPING 1 BBL DISPLACEMENT EACH STAGE. DURING STAGE # 5 PRESSURE CLIMBED TO 2100 PSI. INSTING FROM RETAINER, LEAVING 1.5 BBLS CMT IN TBG. REVERSE OUT. RD CMT EQUIPMENT
	14:30 17:00	2.50	WOR	39		P		TOOH W/ TBG & STINGER. TIH W/ BIT, BIT SUB, DRILL COLLARS, X-OVER & 50 JTS 2-7/8"EUE TBG. SDFN W/ EOT @ 1828'.
7/16/2015	6:00 7:30	1.50	WOR	28		P		TRAVEL TO LOCATION. HOLD SAFETY MEETING ON TRIPPING TBG. FILL OUT & REVIEW JSA.
	7:30 8:00	0.50	WOR	39		P		TIH TO CMT ON TOP OF CMT SET @ 2860'.
	8:00 11:30	3.50	WOR	10		P		RU POWER SWIVEL. DRILL 12' CMT ON CMT RETAINER, CMT RETAINER & CMT TO 2935'
	11:30 12:30	1.00	WOR	18		P		PRESSURE TEST 7" CSG TO 1800 PSI FOR 30 MINUTES. TESTED GOOD
	12:30 14:30	2.00	WOR	10		P		TIH & CLEAN 30' OF SAND OFF OF WRBP SET @ 4000'. CIRCULATE CLEAN.
	14:30 16:00	1.50	WOR	39		P		TOOH LAYING DOWN DRILL COLLARS & BIT. TIH W/ WRBP RETRIIVING TOOL & 142 JTS 2-7/8"EUE TBG. SDFN
7/17/2015	6:00 7:30	1.50	WOR	28		P		TRAVEL TO LOCATION. HOLD SAFETY MEETING ON RELEASING WRBP. FILL OUT & REVIEW JSA.
	7:30 9:00	1.50	WOR	39		P		CONT TIH W/ 40 JTS 2-7/8"EUE TBG. LATCH ONTO & RELEASE WRBP SET @ 4000'. TOO H W/ T BG & WRBP.

2.1 Operation Summary (Continued)

Date	Time Start-End	Duration (hr)	Phase	Activity	Sub	OP Code	MD from (ft)	Operation
	9:00 12:30	3.50	WOR	39		P		TIH W/ ON/OFF SKIRT, 5 JTS 2-3/8"EUE TBG, X-OVER & 229 JTS 2-7/8" EUE TBG. TAG PKR SET @ 9260'.
	12:30 15:00	2.50	WOR	06		P		BREAK REVERSE CIRCULATION & CIRCULATE HOLE W/ PKR FLUID, CIRCULATING 6' OF SAND OFF OF PKR.
	15:00 20:00	5.00	WOR	16		P		INSTALL WEATHERFORD RELEASING HANGER W/ 2 WAY CHECK VALVE INSTALLED IN HANGER. LAND TBG IN WELL HEAD. RELEASE HANGER. DRP DOWN & LATCH ONTO PKR W/ ON/OFF TOOL. PU & LAND TBG IN 15K TENSION. ND BOP STACK. NU WELL HEAD. PRESSURE TEST & CHART WELL HEAD TO 5000 PSI FOR 10 MINUTES. RU LUBRICATER & RETRIEVE 2 WAY CHECK VALVE FROM TBG HANGER.PRESSURE TEST 7' ANNULUS TO 1000 PSI FOR 15 MINUTES. TESTED GOOD. PUMP OUT PLUG @ 4600 PSI.
	20:00 6:00	10.00	FB	19		P		OPEN WELL ON A 14/64" CHOKE @ 2500 PSI. FLOW WELL TO PRODUCTION FACILITY. RECOVERED 285 BBLS OIL, 58 MCF GAS & 328 BBLS WTR. TBG PRESSURE @ REPORT TIME 2700 PSI. CSG PRESSURE 0 PSI. 9-5/8" ANNULUS PRESSURE 0 PSI

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